Analytical Report 2006-07

(68)

For Acc

SCERT

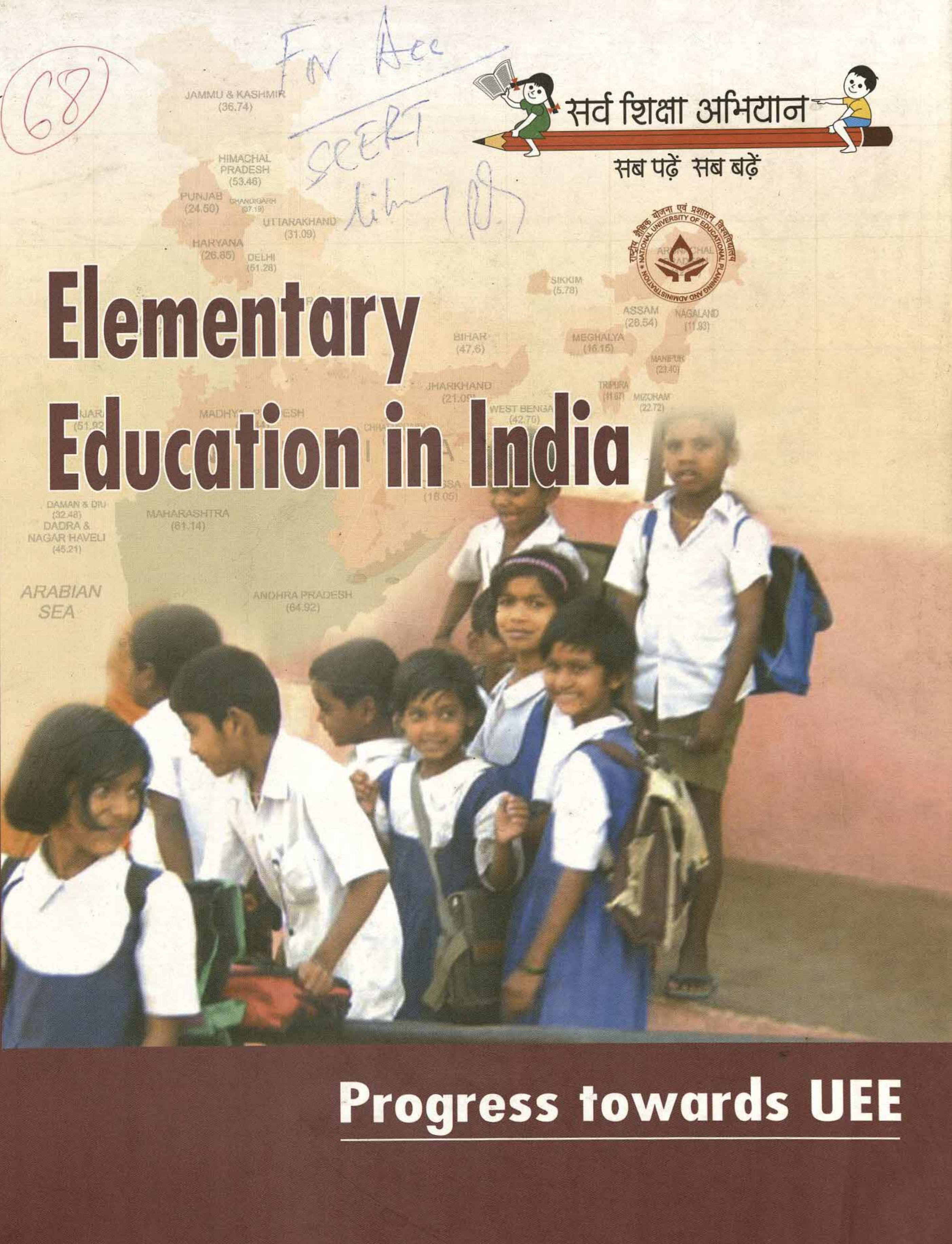
library (D)

सर्व शिक्षा अभियान

सब पढ़ें सब बढ़ें

National University of Educational Planning and Administration

Elementary Education in India



Progress towards UEE

Arun C. Mehta

Analytical Report 2006-07

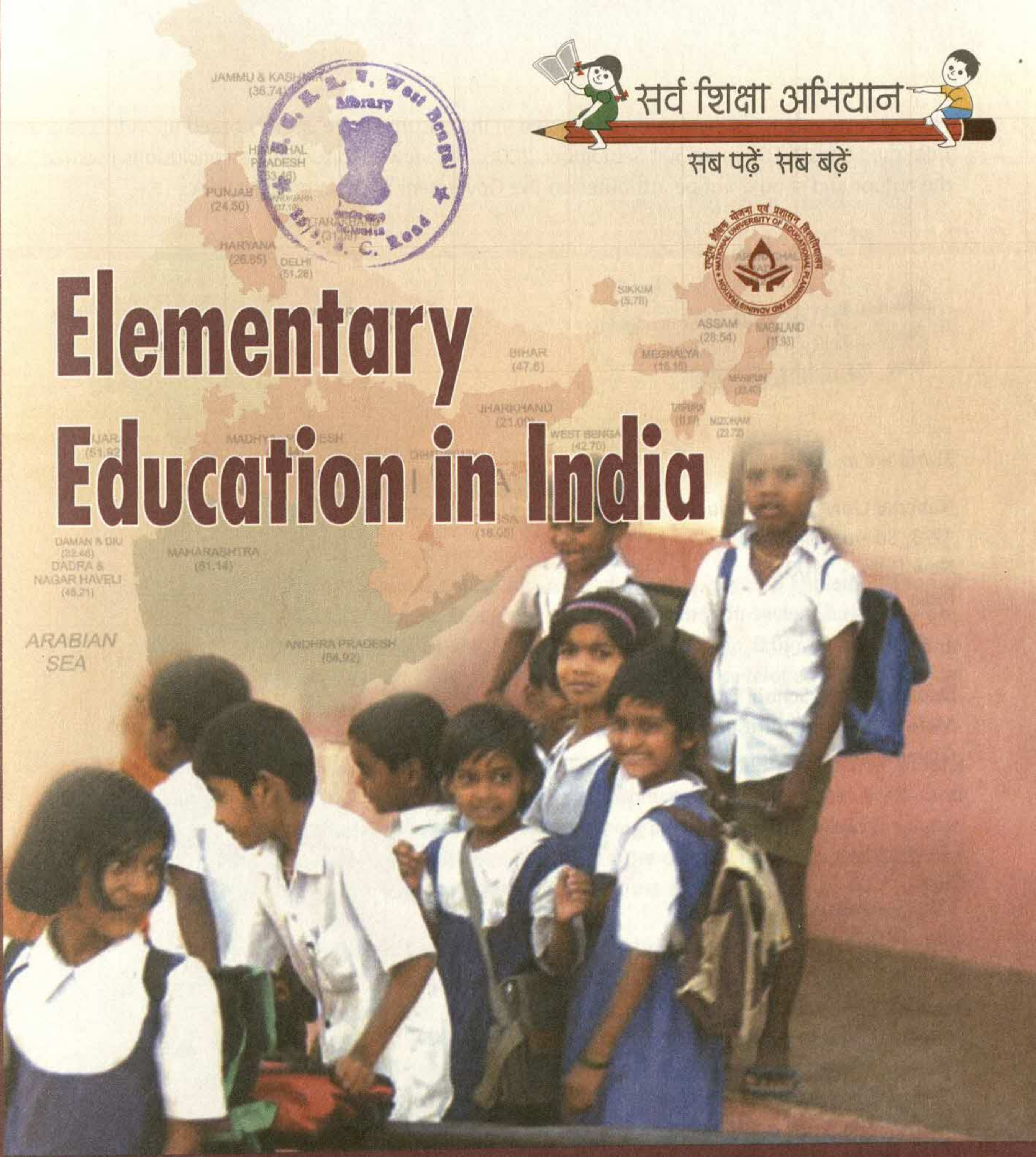
सर्व शिक्षा अभियान

सब पढ़ें सब बढ़ें

राष्ट्रीय शैक्षिक योजना एवं प्रशासन विश्वविद्यालय
NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION

S.C.E.R.T., West Bengal
Library
25/3, [illegible] C. Road

Elementary Education in India



Progress towards UEE

Arun C. Mehta

The data presented and indicators constructed in the document are entirely based upon the data as received from the States & UTs as on 30th September, 2006. The views expressed and conclusions reached are that of the author and should not be attributed to the Goverment of India or to NUEPA.

[illegible]
Date 28.12.2010
Accn. No 14372

Published in 2008 by

National University of Educational Planning and Administration
17-B, Sri Aurobindo Marg
New Delhi - 110016
India

and

Department of School Education and Literacy
Ministry of Human Resource Development
Government of India

Cover Photograph
Courtesy : B.K. Panda

Design, Layout and Printing by
International Print-o-Pac Limited
C-4 to C-11, Hosiery Complex
Phase II Extension
NOIDA - 201 305 (Uttar Pradesh)

© NUEPA 2008

सत्यमेव जयते

अरुण कुमार रथ
सचिव
ARUN KUMAR RATH
SECRETARY

भारत सरकार
मानव संसाधन विकास मंत्रालय
स्कूल शिक्षा और साक्षरता विभाग
नई दिल्ली - 110 001
Government of India
Ministry of Human Resource Development
Department of School Education & Literacy
124 'C' Wing, Shastri Bhavan, New Delhi-110 001
Tel.: 23382587, 23381104, Fax: 23387859
E-mail: secy.eel@nic.in

FOREWORD

Development of a sound information system is critical for successful monitoring and implementation of any programme, particularly in social sectors. Design of a school information system has, therefore, been accorded priority from the very beginning of the District Primary Education Programme (DPEP) in 1994, as a result of which the District Information System for Education (DISE) was developed by the National University of Educational Planning and Administration (NUEPA).

Importance of an Educational Management Information System (EMIS) was reiterated when *Sarva Shiksha Abhiyan* (SSA) was launched in 2001. SSA guidelines envisage development of a transparent EMIS, and preparatory activities of the programme included substantial strengthening of MIS infrastructure in the States and UTs of the country. I am happy to note that all the States & UTs of the country have adopted DISE and EMIS units have been established both at the state and district levels across the country.

District and State Elementary Education Report Cards as well as Elementary Education in Rural and Urban India have been made available to users. I am happy to present *Elementary Education in India: Analytical Report/Tables for the year 2006-07*. Information presented in the volume is particularly valuable for implementing educational programmes like SSA in the decentralized context. I am confident that this set of data will be used in planning for good quality elementary education, and that data users, researchers and development planners interested in the Indian education system will find the volume useful.

I must take this opportunity to thank UNICEF, Delhi, for consistently supporting EMIS activities since 1994, as well as NUEPA, especially Dr. Arun C. Mehta, Professor and Head, Department of EMIS and his team, for bringing out the present publication.

(Arun Kumar Rath)

Acknowledgements

For the last several years, NUEPA has been actively involved in strengthening Educational Management Information System (EMIS) in the country. The *Analytical Report 2006-07* is based on the data received from all the 35 States and Union Territories of the country. The publication presents not only the data up to elementary level but also brings in many new dimensions of elementary education into focus. It incorporates data on children with disabilities, examination results, mediums of instruction, students' flow including transition and retention rates, teachers, utilization of school development and TLM grants, and many other parameters on which not much information is available from other sources.

The *Analytical Report/Tables* is based on the data received from as many as 1.2 million schools spread over 609 districts across 35 States & UTs. The study of this magnitude cannot be completed without the active involvement and participation of the EMIS professionals at the national and sub-national levels. I am extremely thankful to all the State Project Directors, the state level EMIS coordinators and district level programmers and data entry operators for timely supply of data.

I take this opportunity to thank UNICEF, Delhi, for consistently supporting EMIS activities ever since the inception of DISE and Ms Vrinda Sarup, Joint Secretary, Department of School Education & Literacy, Government of India, who played a crucial role in facilitating the implementation of DISE in various states. The contribution of Ms Neelam Rao, Director (SE & L), is also gratefully acknowledged.

I am thankful to Prof Ved Prakash, Vice-Chancellor, NUEPA, for guidance, encouragement and consistent support to DISE activities.

The contribution of Shri Naveen Bhatia, Computer Programmer and Shri Shalender Sharma, Project Senior Systems Analyst, in database management, is gratefully acknowledged.

I am also thankful to Shri P. N. Tyagi for creating maps and Ms Alka Mishra for efficient assistance and colleagues in the Publication Unit, especially Shri Pramod Rawat, Deputy Publication Officer and Ms. Sheeja Biju, Project Publication Officer, for their keen interest in timely bringing out the publication.

We are encouraged by the enormous number of comments received from data users and hope that the present publication will also be received well by education planners, policy formulators and researchers. Any suggestion for improvement is most welcome.

Arun C. Mehta
arunmehta@nuepa.org

Disclaimer

Raw data presented in the document or used for calculating indicators are essentially based on data provided by States and UTs through annual data collection (as on 30th September, 2006) under SSA (DISE).

NUEPA is committed to provide professional and software support to all States and UTs as well as for dissemination and analysis of the data as it is provided by the individual States and UTs. In no way, NUEPA is involved in data collection as such and therefore, the acuracy and truthfulness of the data rest with the States/UTs.

Contents

Foreword iii
From the Vice-Chancellor's Desk v
Acknowledgements vii
List of Tables xv
List of Figures xviii
List of Maps xxi
Abbreviations xxiii
Executive Summary xxv

PART I STRENGTHENING EMIS IN INDIA : DISE INITIATIVES **1-18**
Background
DISE 2001 Software: Main Features
Major Outcome of DISE Efforts
DISE : Coverage
Publications
Concerns about Quality of Data
Random Checking of Data

PART II SCHOOL & FACILITY INDICATORS **19-84**
Introduction
Number of Schools
Ratio of Primary to Upper Primary Schools/Sections
Location of Schools
Head Master in Schools
School Management
- Department of Education Management
- Tribal/Social Welfare Department
- Local Body Managements
- Private Managements

Schools Located In Rural Areas
Status of School Buildings
Type of School Building
- Primary Schools
- Elementary Schools
- Upper Primary Schools
- Higher Secondary Schools

Average Number of Classrooms

राष्ट्रीय शैक्षिक योजना एवं प्रशासन विश्वविद्यालय
NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION

Single-Classroom Schools
Condition of Classrooms
Student-Classroom Ratio
Distribution of Schools by Enrolment & Enrolment Size
Single-Teacher Schools
Facilities in Schools

- Drinking Water Facility
- Type of Drinking Water
- Common and Separate Toilets for Girls
- Computers in Schools
- Ramp in Schools
- Kitchen-Sheds in School

Miscellaneous Facilities in Schools

- Boundary Wall
- Playground in Schools
- Electricity Connection
- Book-Bank in Schools
- Medical Check-up in Schools
- Pre-Primary Sections
- Residential Schools
- Part-Time Shift Schools

School Development Grant
Teaching-Learning Material Grant
Concluding Observations

PART III **ENROLMENT-BASED INDICATORS** **85-128**

Introduction
Participation of Girl's
Gender Parity Index
Share of Girls' Enrolment
Enrolment in Rural Areas
Enrolment in Government Schools
Share of SC, ST, OBC and Minority Enrolment

- SC and ST Enrolment
- OBC and Muslim Enrolment

Share of Disabled Children in Enrolment

- Number of Disabled Children
- Enrolment by Nature of Disability

Share of Pre-Primary Enrolment
Enrolment in Single-Teacher Schools and Schools with Student-Classroom Ratio 60 & Above

Enrolment in Single-Teacher Schools
Enrolment in Schools with Student-Classroom Ratio 60 & Above
Retaining Capacity of the System
- Apparent Survival Rate
- Retention Rate
- Average Flow Rates

Analysis of Flow Rate
- Promotion Rate
- Repetition Rate
- Dropout Rate
- Transition Rate

Percentage of Over-Age and Under-Age Children
Enrolment Ratio
Examination Results
Concluding Observations

PART IV TEACHER-RELATED INDICATORS 129-166

Introduction
Number of Teachers
Female Teachers
Average Number of Teachers
Pupil-Teacher Ratio
Age Profile of Teachers
Academic and Professional Qualifications of Regular Teachers
In-Service Training of Teachers
Para-Teachers
Academic Qualifications of *Para*-Teachers
Professional Qualifications of *Para*-Teachers
Distribution of Teachers by Caste
Teachers Involvement in Non-Teaching Assignments
Concluding Observations

PART V EDUCATIONAL DEVELOPMENT INDEX 167-186

Introduction
Indicators Used
Methodology
Analysis of EDI
- North-Eastern States
- Smaller States
- Major States

Concluding Observations

List of Tables

Table A1 DISE : Annual Publications
Table A2 DISE 2006-07 : Coverage
Table A3 DISE 2006-07 : State Summary
Table A4 Information about Five Percent Random Sample Checking of Data
Table B1 Distribution of Schools by School Category
Table B2 Ratio of Primary to Upper Primary Schools/Sections
Table B3 Ratio of Primary to Upper Primary Schools/Sections by Management
Table B3(A) Schools Established Since 1994 by Category
Table B3(B) Percentage of Schools Established Since 1994 to Total Schools by Category
Table B4 Location of Schools from the Cluster Resource Centre
Table B5 Schools Visited by CRC Coordinators and Schools Inspected
Table B6 Distribution of Schools by Management
Table B7 Percentage of Schools by Management and Category
Table B8 Percentage of Schools in Rural Areas
Table B9 Status of School Buildings by Category
Table B10 Percentage of Schools by Type of Building
Table B11 Average Number of Classrooms by School Category
Table B12 Percentage of Single-Classroom Schools by Category
Table B13 Distribution of Classrooms by Condition and Category
Table B14 Student-Classroom Ratio by Category
Table B15 Percentage Distribution of Schools by Enrolment
Table B16 Average Enrolment by Category
Table B17 Percentage of Single-Teacher Schools by Category
Table B18 Schools Having Drinking Water Facility in School
Table B19 Schools by Type of Drinking Water Facility
Table B20 Percentage of Schools Having Common Toilets in School
Table B21 Percentage of Schools Having Girls Toilets in School
Table B22 Percentage of Schools Having Computers in School
Table B23 Percentage of Schools Having Ramp in School
Table B24 Percentage of Schools Having Kitchen-Sheds
Table B25 Schools that Received and Utilized School Development Grant
Table B26 Schools that Received and Utilized TLM Grant
Table C1 Gender Parity Index in Enrolment
Table C2 Percentage of Girl's Enrolment
Table C3 Percentage of Enrolment in Rural Areas to Total Enrolment
Table C4 Percentage of Enrolment in Government Schools to Total Enrolment

Table C5 Percentage of SC & ST Enrolment to Total Enrolment
Table C6 Share of SC & ST Enrolment in Government and Private Management Schools
Table C7 Percentage of OBC & Muslim Enrolment to Total Enrolment
Table C8 Enrolment of Children with Disability
Table C9 Enrolment by Nature of Disability
Table C10 Share of Enrolment in Pre-Primary Classes to Total Enrolment
Table C11 Share of Enrolment in Pre-Primary Classes to Total Enrolment by Management
Table C12 Percentage Share of Enrolment in Single-Teacher Schools
Table C13 Share of Enrolment in Schools with Student-Classroom Ratio 60 & Above
Table C14 Apparent Survival Rate, Primary Grades : All India
Table C15 Apparent Survival Rate: Primary Grades, State-specific
Table C16 Retention Rate at the Primary Level
Table C17 Average Flow Rates: Primary Grades I-V
Table C18 Grade-specific Number of Repeaters and Reasons of Repetition
Table C19 Transition Rate from Primary to Upper Primary Level of Education
Table C20 State-specific Transition Rate from Primary to Upper Primary Level of Education
Table C21 Indicators of Internal Efficiency
Table C22 Under-Age and Over-Age Children
Table C23 Enrolment and GER at Primary Level
Table C24 Enrolment Ratio at Primary Level
Table C25 Examination Results in the Terminal Grades
Table D1 Distribution of Teachers by School Category
Table D2 Percentage Distribution of Teachers by Category
Table D3 Distribution of Female Teachers by School Category
Table D4 Distribution of Female Teachers by School Category and Management
Table D5 Average Number of Teachers by School Category
Table D6 Average Number of Teachers by School Category and Management
Table D7 Pupil-Teacher Ratio by School Category
Table D8 Pupil-Teacher Ratio by School Category and Management
Table D9 Percentage of Schools having PTR above 100 by School Category
Table D10 Percentage of Schools having PTR above 100 by School Category and Management
Table D11 Percentage of Teachers Aged 55 Year and Above
Table D12 Academic Qualification of All Category Regular Teachers
Table D13 Academic Qualification of Primary School Regular Teachers
Table D14 Professional Qualification of All Category Regular Teachers
Table D15 Professional Qualification of Primary School Regular Teachers
Table D15(A) Percentage of Regular and *Para*-Teachers with Professional Qualifications
Table D16 Percentage of Teachers Provided In-Service Training
Table D17 Distribution of *Para*-Teachers by School Category
Table D18 Percentage of *Para*-Teachers to Total Teachers

Table D19 Academic Qualification of All Category *Para*-Teachers
Table D20 Academic Qualification of Primary School *Para* -Teachers
Table D21 Percentage of Para-Teachers with Professional Qualification by School Category
Table D22 Professional Qualification of *Para*-Teachers
Table D23 SC & ST Teachers Employed in Government and Private Managed Schools
Table D24 Average Number of Working Days Spent on Non-Teaching Assignments
Table E1 Indicators Used in Computing EDI
Table E2 (A) Indices & Ranking at Primary/Upper Primary Level : North-Eastern States
Table E2 (B) Composite Educational Development Index : North-Eastern States
Table E3 (A) Indices & Ranking at Primary/Upper Primary Level : Smaller States/UTs
Table E3 (B) Composite Educational Development Index : Smaller States/UTs
Table E4 (A) Indices & Ranking at Primary/Upper Primary Level : Major States
Table E4 (B) Composite Educational Development Index : Major States

NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION

List of Figures

Figure 1.1 Data Flow Diagram
Figure 1.2 DISE Coverage
Figure 2.1 Percentage Distribution of Schools by Category
Figure 2.2 Location of Schools from the CRC
Figure 2.3 Percentage Distribution of Schools Inspected
Figure 2.4 Percentage Distribution of Schools Visited by CRC Coordinator
Figure 2.5 Percentage Distribution of Schools by Management
Figure 2.6 Percentage Share of Schools in Rural Areas by Category
Figure 2.7 Status of School Building by School Category
Figure 2.8 Percentage Distribution of Primary Schools by Type of Building
Figure 2.9 Percentage of Schools Established Since 1994 and Having Building
Figure 2.10 Percentage Distribution of Primary Schools with Type of Building
Figure 2.11 Average Number of Classrooms : All Government Managed Schools
Figure 2.12 Average Number of Classrooms : All Private Managed Schools
Figure 2.13 Average Number of Classrooms
Figure 2.14 Percentage of Single-Classroom Schools by School Category
Figure 2.15 Percentage of Single-Classroom Primary Schools
Figure 2.16 Condition of Classrooms in Primary Schools
Figure 2.17 Student-Classroom Ratio in Primary Schools : State-specific
Figure 2.18 Student-Classroom Ratio in Primary Schools : All India
Figure 2.19 Percentage of Schools with Student-Classroom Ratio Above 60
Figure 2.20 Percentage of Primary Schools with Student-Classroom Ratio Above 60
Figure 2.21 Percentage Distribution of Primary Schools by Enrolment
Figure 2.22 Percentage of Primary Schools with ≤ 50 Students : All India
Figure 2.23 Percentage of Primary Schools with ≤ 50 Students : State-specific
Figure 2.24 Average Enrolment in Schools
Figure 2.25 Percentage of Single-Teacher Schools by School Category
Figure 2.26 Percentage of Schools with Drinking Water Facility
Figure 2.27 Percentage Distribution of Schools by Type of Drinking Water Facility
Figure 2.28 Percentage Distribution of Schools Having Common Toilet
Figure 2.29 Percentage Distribution of Schools Having Common Toilet
Figure 2.30 Percentage Distribution of Schools Having Girls Toilet

Figure 2.31 Percentage Distribution of Schools Having Computer
Figure 2.32 Schools with Boundary Wall by Management and Category
Figure 2.33 Percentage Distribution of Schools Having Electricity Connection
Figure 2.34 Percentage Distribution of Schools Having Book Bank
Figure 2.35 Percentage of Schools with attached Pre-Primary Section
Figure 2.36 Percentage of Residential Schools
Figure 2.37 Percentage of Schools Having Used School Building as Shift School
Figure 2.38 Percentage Distribution of Schools Received School Development Grant
Figure 2.39 Percentage Distribution of Schools Received School Development Grant
Figure 2.40 Percentage Distribution of Schools Received TLM Grant
Figure 2.41 Percentage Distribution of Schools Received TLM Grant by School Category
Figure 3.1 Gender Parity Index in Enrolment
Figure 3.2 Percentage of Girls Enrolment to Total Enrolment
Figure 3.3 Percentage of Girls Enrolment in Primary & Upper Primary Classes
Figure 3.4 Percentage Enrolment in Primary & Upper Primary Classes in Rural Areas to Total Enrolment
Figure 3.5 Percentage Enrolment in Government Schools
Figure 3.6 Percentage of SC & ST Enrolment in Primary & Upper Primary Classes to Total Enrolment
Figure 3.7 Percentage of SC & ST Enrolment in Government & Private Managed Schools
Figure 3.8 Percentage of OBC Enrolment to Total Enrolment
Figure 3.9 Percentage of Disabled Students by Nature of Disability
Figure 3.10 Percent Share of Enrolment in Pre-Primary Classes to Total Enrolment in Primary Schools
Figure 3.11 Percentage Enrolment in Single-Teacher Schools
Figure 3.12 Percentage of Enrolment in Primary Schools with Student-Classroom Ratio Above 60
Figure 3.13 Survival Rate - Grade V
Figure 3.14 Retention Rate at Primary Level
Figure 3.15 Repetition Rate : Cohort 2005-06
Figure 3.16 Average Flow Rates : Classes I-V, Cohort 2005-06
Figure 3.17 Percentage of Repeaters by Reasons to Total Repeaters
Figure 3.18 Transition Rate from Primary to Upper Primary Level
Figure 3.19 Input per Primary Graduate
Figure 3.20 Percentage of Under-Age & Over-Age Children
Figure 3.21 GER at Primary Level
Figure 3.22 Percentage of Children Passed with $\geq$ 60 Percent Marks by Management
Figure 3.23 Percentage of Children Passed with $\geq$ 60 Percent Marks : 2002-03 to 2005-06
Figure 3.24 Percentage Distribution of Schools Received School Development Grant
Figure 4.1 Distrbution of Teachers by Category
Figure 4.2 Percentage of Female Teachers

NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION

Figure 4.3 Percentage of Female Teachers in Primary and All Schools
Figure 4.4 Average Number of Teachers per School by Category
Figure 4.5 Average Number of Teachers in Primary Schools
Figure 4.6 Pupil-Teacher Ratio in Primary Schools
Figure 4.7 Percentage of Schools with PTR Above 100
Figure 4.8 Percentage of Primary Schools with PTR Above 100
Figure 4.9 Percentage of Teachers by Academic Qualification : All Category Regular Teachers
Figure 4.10 Percentage Distribution of Teachers Received In-Service Training
Figure 4.11 Percentage of *Para*-Teachers to Total Teachers
Figure 4.12 Percentage of *Para*-Teachers by Educational Qualification
Figure 4.13 Percentage of SC & ST Teachers
Figure 4.14 Percentage of Teachers Involved in Non-Teaching Assignments
Figure 4.15 Average Number of Working Days Spent on Non-Teaching Assignments

List of Maps

Map 2.1 Ratio of Primary to Upper Primary Schools/Sections
Map 2.2 Average Number of Classrooms
Map 2.3 Average Student-Classroom Ratio
Map 2.4 Schools with Drinking Water Facility
Map 2.5 Schools with Girls Toilet
Map 2.6 Schools with Ramp
Map 3.1 Average Repetition Rate : Primary Level
Map 4.1 Average Number of Teachers
Map 4.2 Percentage of Female Teachers
Map 4.3 Pupil-Teacher Ratio
Map 4.4 Para-Teachers to Total Teachers
Map 5.1 Composite Educational Development Index

राष्ट्रीय शैक्षिक योजना एवं प्रशासन विश्वविद्यालय
NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION

Abbreviations

AS	Alternative Schooling
Avg	Average
BAS	Baseline Assessment Studies
BRC	Block Resource Center
CR	Completion Rate
CRC	Cluster Resource Center
DIET	District Institute of Education and Training
DISE	District Information System for Education
DoR	Drop out Rate
DPEP	District Primary Education Programme
DRC	District Report Cards
Ed. CIL	Educational Consultants India Limited
EGS	Education Guarantee Scheme
EMIS	Educational Management Information System
GoI	Government of India
Govt.	Government
GER	Gross Enrolment Ratio
GPI	Gender Parity Index
Hr.	Higher
M.A.	Master of Arts
M. Phil	Master of Philosophy
MHRD	Ministry of Human Resource Development
NCERT	National Council of Educational Research and Training
NER	Net Enrolment Ratio
NUEPA	National University of Educational Planning and Administration
No.	Number
NSSO	National Sample Survey Organisation
OBC	Other Backward Class
ORC	Other Reserved Class
PAB	Project Approval Board
Ph.D.	Doctor of Philosophy
P + Sec./Hs.	Primary with Upper Primary & Secondary/Higher Secondary
P + UP	Primary with Upper Primary
P. only	Primary only
PR	Promotion Rate

PTR : Pupil-Teacher Ratio
Pvt. : Private
RR : Repetition Rate
Recd : Received
SC : Scheduled Castes
SCR : Student-Classroom Ratio
SCERT : State Council of Educational Research and Training
SDG : School Development Grant
Sec. : Secondary
SRC : State Report Cards
SSA : Sarva Shiksha Abhiyan
ST : Scheduled Tribes
TLM : Teaching Learning Material
TLM Grant : Teaching Learning Material Grant
TR : Transition Rate
TSG : Technical Support Group
U. Prim./U.P : Upper Primary
U.P. Only : Upper Primary only
UEE : Universalisation of Elementary Education
UP + Sec : Upper Primary with Secondary/Higher Secondary
UPE : Universalisation of Primary Education
KGBV : Kasturba Gandhi Balika Vidyalaya

NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION

Executive Summary

1. Introduction

1.1 The National University of Educational Planning and Administration has created a comprehensive database on elementary education in India known as District Information System for Education (DISE), under one of its most prestigious projects. The project covers both primary and upper primary schools/sections of all the districts of the country. The MIS Units are now operational both at the district and state levels and are equipped with necessary hardware and software. The DISE software is also operational in all the districts of the country and is providing vital information for policy formulation and preparation of district elementary education plans. What is more remarkable about DISE is that it has drastically reduced the time-lag in the availability of educational statistics which is now down from 7-8 years to less than a year at the national level and only a few months at the district and state levels.

1.2 The National University has successfully developed School Report Cards (*http://schoolreportcards.in*) of more than 1 million primary and upper primary schools/sections, and are available for 2005-06 and 2006-07. In addition to quantitative information, the Report Cards also provide qualitative information and descriptive reports about individual schools. And, all this information can now be accessed on the click of a mouse. The Report Cards provide the users comprehensive information on all the vital parameters, be it student, teacher or school related variables, in concise, accurate and standard format which is easy to understand and allows meaningful comparisons to be made among schools. Users can also download raw data as per their requirement for further empirical studies. All DISE publications, such as 'district and state report cards', 'elementary education in rural and urban India', 'DISE flash statistics including educational development index', and 'elementary education in India: progress towards UEE, analytical reports', are available at *http://dise.in*.

1.3 Despite significant increase in the number of schools covered, a few schools, largely private un-aided ones, are yet to be covered under DISE. To further improve the quality of data, it has now been made mandatory for all the states to check the data on five percent random sample basis through an independent agency each year. States are advised to initiate corrective measures in the light of the findings of sample checking of data.

2. The Present Publication

2.1 A variety of schools and school-related indicators by school categories along with the average of all states covered under DISE in 2006-07, as also the selected indicators for previous years are presented in the present publication. The tables presented in the document contain information on hundreds of variables, mostly by school category and wherever necessary by rural and urban areas, and management category. Practically, all such indicators on which information is required for formulating reliable elementary education plans are presented *'in ready-to-use form'*. The indicators analyzed and tables presented are divided into the following sections: School and Facility Indicators; Enrolment-Based Indicators; and Teacher-Related Indicators. In addition, a separate section, devoted to Educational Development Index is given. The major highlights of *Elementary Education in India: Progress Towards UEE, Analytical Report 2006-07* are given in the following sections.

3. School-Based Indicators

3.1 With the improved coverage, the number of schools/sections imparting elementary education dealt with under DISE increased many-fold. From 8,53,601 schools in 2002-03, their number has increased to 11,24,033 schools in 2005-06 and further to 11,96,663 schools in 2006-07. Of the total schools, about 87.15 percent schools are located in the rural areas. During the same period, the number of primary schools increased from 6,01,866 to 7,79,482. Category-wise distribution of schools reveals that majority of the schools (65.14 percent) are independent primary schools. The increase in the number of schools is also reflected in the ratio of primary to upper primary schools/sections which clearly shows the impact of *Sarva Shiksha Abhiyan* under which a large number of schools have been opened in the recent past. This ratio for the year 2006-07 is one upper primary school/section for every set of 2.45 primary schools/sections compared to 2.57 in 2005-06 and 2.68 schools/sections in 2004-05. It is noticed that in about 22 states, the ratio of primary to upper primary schools/sections is better than the national average of 2.45. Many of the states have the ratio equivalent to almost two, all of which suggests that by and large schooling facilities have been created and are available across the country. Despite significant improvement in the ratio, there are a few states, such as Arunachal Pradesh, Assam, Bihar, Jharkhand and West Bengal, where the ratio still needs to be improved.

3.2 Obtaining data from all the private schools is a challenging task. Concerted efforts made by the National University have resulted in a significant increase in the number of such schools covered under DISE over a period of time. This is important to assess the true picture of universalisation of elementary education in the country. As many as 69,473 and 1,56,162 schools in 2006-07 were respectively being managed by the Private Aided and Private Unaided managements. DISE data also suggests that majority of the private schools are un-aided schools (69.21 percent). The percentage of government and government aided schools is as high as 86.63 which shows that nine out of every ten schools imparting elementary education in the country are funded by the government.

3.3 A significant achievement is that most of the new schools have a school building. As many as 3,82,271 new schools have been opened since 1994-95 majority of which are located in the rural areas and 92 percent of these schools have been provided a school building. During the period 1994-95 to 2006-07, as many as 2,58,780 primary schools have been opened which is 33.20 percent of total primary schools in the country. About 91 percent of such schools have been provided school building.

3.4 Not only the number of schools and schools with buildings has increased but the average number of instructional rooms has also increased across the country. This is essential for smooth teaching-learning transaction. Irrespective of the school type, schools imparting elementary education across 609 districts in 2006-07 had an average of 4.1 classrooms, compared to 3.5 in 2002-03. However, a significant difference is noticed in average number of instructional rooms in primary schools located in rural areas (2.7 classrooms) and urban areas (4.6 classrooms) and also in government (2.6 classrooms) and private (4.8 classrooms) managed schools. About 68 percent classrooms in primary schools are in good condition and remaining 32 percent need either minor or major repairs.

3.5 Schools imparting elementary education across the country vary in size. There are about 7.91 and 16.01 percent schools which respectively have enrolment between 1-25 and 26-50. In view of there being a large number of small schools, there is a need to have separate programme for these schools. In view of the large number of such schools (about 24 percent of 1.20 million schools), the National University has undertaken a research study, based on the DISE data. It is hoped that the outcome of the study will help NUEPA in developing planning methodology for small schools.

3.6 Some of the salient highlights with regard to school-based indicators are as follows:

3.6.1 The distribution of schools by type of building shows that 70.12 percent primary schools have *pucca* (permanent) buildings as compared to 9.08 percent having partially *pucca* and another 3.38 percent having *kuchcha* (temporary) building. Efforts should be made to provide all schools a *pucca* school building.

3.6.2 The percentage of single-classroom schools during 2002-03 to 2006-07 declined from 12.08 percent to 9.71 percent. Despite the decline in percentage of single-classroom schools, there number in absolute terms is significant, which needs intervention without delay.

3.6.3 Over a period of time, the student-classroom ratio has shown improvement. On an average about 40 students are sitting in one classroom in primary schools. However, in case of primary schools, the student-classroom ratio in states of Bihar (92), Jharkhand (79) and Uttar Pradesh (53) is still very high.

4. Facility Indicators

4.1 Like number of schools, instructional rooms and ratio of primary to upper primary sections/schools, facilities in schools have also improved significantly which is true for physical, ancillary and teaching-learning facilities. DISE data clearly shows significant improvement in such facilities in schools which is largely because of the government's initiatives like SSA. Availability of basic facilities in schools not only attract more children to schools but also help in improving retention rate. More than 85 percent schools had drinking water facility available in 2006-07 compared to 83 percent in 2005-06. A little less than 50 percent of the total schools had water hand pumps, and 23 percent of schools had tap water facility in school. Like drinking water facility, more schools now have common toilets and separate toilets for girls. About 58 percent schools had common toilets in schools in 2006-07, compared to 42 percent schools in 2003-04; and 43 percent schools in 2006-07 had separate toilets for girls compared to only 28 percent in 2003-04.

4.2 Some of the other major facilities available in schools are:

4.2.1 During the period 2002-03 to 2006-07, the number of schools with computers increased impressively. As many as 1,60,749 schools reported to have a computer, which is 13.43 percent of the total schools. In absolute terms, Maharashtra has the highest number of schools (28,882 schools, 33.42 percent) with computers. The percentage of primary schools with computers is 6.51 percent compared to 11.05 percent in case of independent upper primary schools.

4.2.2 The percentage of schools with ramps increased significantly from 4.63 percent in 2002-03 to 26.61 percent in 2006-07; this may help in attracting more physically challenged children to schools. Together with enrolment by nature of disability, DISE is perhaps the only source that provides comprehensive information about physically challenged children in schools.

4.2.3 Providing nutritious food to all children under the mid-day meal scheme is one of the ambitious programmes of the government. For the first time, a variable on availability of kitchen-shed in school was added to DISE during 2006-07. It reveals that 29 percent of schools managed by the government and aided schools have kitchen shed in school. The percentage of such schools is 30 and 23 respectively in the rural and urban areas. The percentage of schools with kitchen-shed varies from 80 in Tamil Nadu to 3 in Jammu & Kashmir.

4.2.4 The percentage of primary schools having attached pre-primary section increased from 14.27 in 2002-03 to 26.69 in 2006-07. The number of such schools is more in urban areas than in rural areas.

4.2.5 Over a period of time, the number of schools receiving school development and TLM grants increased impressively (mostly government run schools). Compared to 3,60,892 schools that received school development grant in 2001-02, the corresponding figure in 2005-06 was as high as 8,52,920 schools (71.27 percent). The number of schools that received TLM grant has been as many as 8,12,349 (67.88 percent) of all types of schools. Majority of the states have utilised more than 90 percent of these funds.

5. Enrolment-Based Indicators

5.1 With the increased coverage of schools under DISE, enrolment both at the primary and upper primary level of education has also increased significantly. The enrolment increased from 101.16 million in 2002-03 to 124.62 million in 2005-06 and further to 131.85 million in 2006-07. The GER at primary level, based on the DISE data is estimated to be 110.86 percent, corresponding to 92.75 percent NER. A few states are near achieving the goal of universal primary enrolment. Over a period of time, enrolment in upper primary classes has also shown consistent increase. From a low of 37.72 million in 2004-05, it has increased to 47.49 million in 2006-07 (GER 64.72 percent).

5.2 Gender Parity Index (GPI) and percentage of girls' enrolment in primary and upper primary classes reveal that there is consistent improvement both in GPI and girls' share in enrolment. The average of 609 districts in 2006-07 indicates a GPI of 0.93 in primary classes and 0.87 in case of upper primary classes. In 2004-05, GPI respectively in primary and upper primary enrolment was 0.91 and 0.83. GPI in primary enrolment indicates that the index is above 0.90 in 28 states. Meghalaya has the highest GPI of one and Chandigarh, the lowest at 0.80.

5.3 The improvement in girls' enrolment is also reflected in girls share to total enrolment. In primary classes, the share of girls' enrolment in 2006-07 was 48.09 percent compared to 47.79 percent in the previous year. Girls share in total enrolment at upper primary level is 46.51 percent; it was 45.80 percent in 2005-06 and 45.02 percent in 2003-04. The percentage of girls' enrolment in government managed schools was found to be higher than in private managed schools for both primary and upper primary enrolment.

5.4 At the primary level, the share of SC and ST enrolment with respect to total enrolment works out to 20.11 and 11.36 percent respectively. Notably, at all levels, government schools are the main providers of educational needs of both SC and ST children. SC and ST enrolment together had a share of 78.50 and 84.55 percent respectively, in government run primary and upper primary schools. The share of OBC enrolment in the primary and upper primary classes is 42.18 and 41.23 percent respectively.

5.5 During 2006-07 DISE data collection, an attempt was made to collect information on enrolment of Muslim children for the first time. The percentage of Muslim enrolment at primary level is reported to be 9.39 against 7.52 at upper primary level. However, being the first year for such data collection, data was not reported from all schools in many district/states. Within these limitations, the percentage of girls' enrolment is as high as 48.65 (GPI, 0.95) and 49.33 (GPI, 0.97) at primary and upper primary levels. Preliminary analysis of data suggests that there are about 40 districts in the country which have 25 percent or more Muslim students in primary classes. Most of these districts are from the states of Assam, Bihar, Jammu & Kashmir, Karnataka, Uttar Pradesh and West Bengal. It is hoped that coverage in terms of Muslim enrolment under DISE would further improve in the following year.

5.6 Much emphasis is being given to inclusive education. DISE is perhaps the only source that collects information on disabled children in elementary classes on regular basis. In 2006-07, about 1.42 million disabled children were enrolled in elementary classes across the country, of which 1.04 million were in primary and 0.38 million in upper primary classes.

5.7 One of the essential requirements to achieve UEE is to retain students in the education system. The apparent survival rate has improved to 73 percent in 2006-07 from 63 in 2004-05. This is also reflected in retention rate at primary level which is estimated to be 70 percent. States like Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh and Tamil Nadu reported above 90 percent retention rate at primary level.

5.8 With improvement in the number of schools, facilities in schools and enrolment, the dropout rate for cohort 2005-06 indicates an average rate of 8.61 percent in primary grades against 9.96 percent during the previous cohort. Kerala with dropout rate of 1.80 percent, Tamil Nadu with 1.54 percent, and Himachal Pradesh with 1.85 percent have almost achieved the goal of universal retention at primary level.

5.9 One of the other important indicators that are essential to achieve UEE is high transition from primary level to upper primary level of education. It has improved significantly from 64.48 percent in 2002-03 to 83.72 percent in 2005-06.

5.10 Learner's achievement is considered as one of the important indicators of quality of education. Examination results at the terminal grades is a proxy indicator of learner's achievement. About 44.96 percent boys and 45.12 percent girls passed Grade IV/V with a score of 60 percent and above, compared to 38.83 percent boys and 40.06 percent girls scoring 60 percent and above marks in Grade VII/VIII.

6. Teacher-Related Indicators

6.1 Availability of teachers in schools is an important variable for quality education. The total number of teachers in 2006-07 suggests that about 5.22 million teachers are engaged in teaching in schools imparting elementary education in the country. The data also shows appointment of a large number of teachers across the country consequent to the SSA interventions. All the schools in the country now have an average of 2 and more teachers. The all-India average reveals that, on an average, there were 4.4 teachers in a school in 2006-07 that imparts elementary education compared to an average of 2.9 teachers per primary school.

6.2 All schools together had 41.86 percent female teachers. Urban areas had higher percentage of female teachers than the rural areas; this is true for all school types. Irrespective of school types, a significant difference is also noticed in case of female teachers in schools under private and government managements.

6.3 Increase in the number of teachers is also reflected in the pupil-teacher ratio which has shown consistent improvement. PTR, both at primary and upper primary levels, is quite comfortable (primary, 36:1 and upper primary, 32:1) and is below 40:1. At primary level, there are only seven states which reported a PTR above 40. At upper primary level, Bihar reported a high PTR of 67:1, compared to 65:1 at primary level. In Bihar, it is not only PTR that is high but it has also reported a high student-classroom ratio of 91. With the appointment of a large number of teachers in the state, pupil-teacher ratio is expected to improve in the year that follows.

6.4 There are about 514 thousand *para*-teachers, constituting around 10 percent of the total number of teachers. About 70,338 schools have only *para*-teachers. The percentage of such schools is very high in Rajasthan, Madhya Pradesh and Chhattisgarh, these respectively having 17.98, 30.71 and 16.53 percent of the total number of schools in these states. About 53 percent male and 49 percent female *para*-teachers are Graduates and above. About 15.40 percent male and 12.61 percent female *para*-teachers in primary schools have BEd or equivalent degrees.

6.5 The average age of teachers across states suggests that majority of the teachers in primary schools are between 26-45 years, which is also true for other types of schools. The percentage of teachers in the age group 18-25 years across school types has been very low but has shown improvement over the previous year; it indicates newly recruited teachers are joining state education system.

6.6 The percentage of teachers involved in non-teaching assignments has been as low as 11.36 percent which shows that the majority of teachers were not involved in non-teaching assignments during the previous academic year. On an average, a teacher was involved in non-teaching assignments only for 16 days. In rural areas, teachers were involved in such assignments for 16 days compared to 18 days in urban areas.

6.7 DISE data reveals that government is the main employer of both Scheduled Castes and Scheduled Tribes teachers. The share of SC and ST teachers together in government schools is as high as 80 percent. As many as 0.64 million SC and 0.46 million ST teachers are engaged in imparting elementary education, respectively representing 12.20 percent and 8.82 percent of the total teachers.

7. Educational Development Index

7.1 Based on the DISE data, an effort has been made to compute Educational Development Index separately for primary and upper primary levels of education as also the composite index for the entire elementary education. The EDIs can play a significant role in assessing progress towards UEE as well as in deciding the future course of investment on elementary education. About 23 indicators were used which were further re-grouped into four sub-groups, namely access, infrastructure, teachers, and outcome indicators. The major findings of EDI are given below.

7.2 The EDI reveals that Sikkim out-performed the other six states in the north-eastern region which is true for primary and composite primary and upper primary levels of education. Seven states have been grouped under smaller states. May be these states are small in size but a cursory look at EDI values indicates that they are doing much better than a number of bigger states. A look at the EDI values indicates a marked improvement in case of Puducherry in case of composite primary and upper primary levels of education. Not only it is ranked first within the set of smaller states, but is also ranked 2nd with an EDI value of 0.771 amongst all the States and UTs of the country in case of composite primary and upper primary levels of education.

7.3 Amongst 21 major states, the top five ranking states are Kerala (EDI, 0.772), Delhi (EDI, 0.757), Tamil Nadu (EDI, 0.741), Himachal Pradesh (EDI, 0.707) and Karnataka (EDI, 0.680). Kerala and Delhi maintained their first and second positions but Karnataka conceded its fourth position to Himachal Pradesh. The EDI value of Karnataka in 2006-07 was higher than the same in the previous year. However, Tamil Nadu at primary level conceded its second position to Kerala and Karnataka its fourth position at upper primary level to Himachal Pradesh. The EDI in Tamil Nadu, in fact, had improved to 0.724 in 2006-07 from 0.672 in the previous year. These states are generally seen as educationally advanced states. Irrespective of an educational level, the difference in EDI values between the highest and lowest ranked states is significant, showing that states are at different levels of educational development.

7.4 Bihar and Jharkhand are ranked 35 and 34 in case of composite primary and upper primary levels of education with an EDI as low as 0.321 and 0.381 respectively which is much lower than the same compared to the top ranked states. Both states had lower EDI values in 2006-07 than in 2005-06 which is by and large (barring upper primary in Bihar) true for both primary, upper primary and composite primary and upper primary levels of education. In the overall ranking, West Bengal and Arunachal Pradesh are placed 33rd and 32nd respectively in case of composite EDI at primary and upper primary level which is quite similar to their positions in 2005-06.

7.5 The analysis of EDI clearly reveals that different states are at different levels of educational development in general, and primary and upper primary levels of education in particular. A few states with high EDI values are termed better than the other states but still they may not be well placed with regard to all the four sets of indicators used in computation of EDI. Even if a state is ranked first, still it may need further improvement for which individual EDI values should be critically analyzed. In addition, there is also a need to analyse each indicator separately and identify states that need improvement.

7.6 The states are advised to compute district-specific EDIs and analyse results separately in case of access, infrastructure, teachers and outcome indicators. Even the top ranking states are not perfect in case of all the four sets of indicators which is reflected in individual EDI values. Variables found to have higher weightage than others should be accorded the top most priority while adopting strategies in the year that follows.

8. DISE: The Way Forward

8.1 Through DISE efforts, information on all aspects of universalisation of education is now available at disaggregated levels which can be used in different ways. The present document has highlighted a number of issues which can be tracked by using DISE data at different levels. Up-to-date information is now available at all desired levels in ready-to-use form. Detailed information is available by school category, management, location, type of schools and wherever necessary, is separately available by gender. The same is also separately available for primary and upper primary levels of education. In view of the data now being available at school, cluster, block, district, state and national levels, evidence-based planning can be initiated at any desired level. DISE data now being available over a period of time, trend analysis on areas of concern can be initiated. Studies on girls participation in educational programmes, enrolment, impact of infrastructure on learner's attainment, pupil-teacher ratio, *para*-teachers, impact of in-service training on classroom transaction, schools with high PTR and students-classroom ratio etc. can be undertaken exclusively based on DISE data. Individual schools lacking minimum facilities can be identified and tracked by using DISE data. A few states have computed district and block-specific EDI; DISE data can be used extensively to track their progress. One of the other important variables available under DISE is grade-wise enrolment and repeaters which can be of immense use in initiating internal efficiency of education system related studies. In a number of districts, since DISE data is now available over more than five years, studies concerning retention and transition rates can be undertaken. Perhaps DISE is the only source which disseminates age and grade matrix which can play an important role while planning for school places. Comprehensive profiles of more than 5.2 million teachers is also being maintained under DISE, which can be used for developing meaningful in-service-training programmes.

8.2 Despite overall improvement, there are a few areas of concern which need to be accorded the top most priority in the following year.

8.2.1 States with high ratio of primary to upper primary schools/sections may like to expand upper primary schooling facilities. All schools imparting elementary education across the country should be provided with minimum essential physical, ancillary and teaching-learning facilities. There are still locations where PTR is not satisfactory and a single classroom has to accommodate a large number of pupils. Possibilities may be explored to provide additional classrooms to schools having high student-classroom ratio.

8.2.2 A good number of schools are single-teacher schools despite availability of an average of four teachers per school, all of which need serious intervention. May be rationalization of teachers is the only solution. Percentage of female teachers has improved but in a few states there number is not satisfactory and hence need improvement. Process of filling-up of vacant positions of teachers across the country may be initiated immediately. Quite a good number of schools are left to *para*-teachers to manage school affairs. Studies should be initiated on the functioning of all such schools.

8.2.3 The average dropout rate being high at primary level, it needs to be checked, without which neither the goal of universal primary education nor elementary education can be achieved. This is also true for transition from primary to upper primary level of education. For that purpose, reason-specific child-centered strategies need to be adopted.

8.2.4 The quality of education in terms of examination results and learners' attainment across the country is not satisfactory. It may be improved through active participation of teachers. Useful in-service programmes can be of great help in improving classroom transaction. Identification of training needs and review of existing in-service programmes may be helpful in making these programmes more effective.

8.2.5 States may be advised to compute district-specific EDIs and analyse EDI values separately in case of access, infrastructure, teachers and outcome indicators. Rather, they may like to analyse all the 23 indicators used in EDI computation district-wise, and within a district, block-wise. This may be followed by adopting appropriate strategies.

Strengthening EMIS in India DISE Initiatives

Background

Free and compulsory education to all children up to the age of fourteen years is a Constitutional commitment in India. The Government of India initiated a number of programmes to achieve the goal of Universalisation of Elementary Education (UEE) among which the *Sarva Shiksha Abhiyan* (SSA), launched in 2001, is the most recent one. It aims at achieving universal elementary education of satisfactory quality by 2010.

For successful implementation of any educational programme, effective monitoring and an efficient information system are essential. While monitoring framework for SSA is developed separately, concerted efforts have also been made towards strengthening Educational Management Information System (EMIS) in case of elementary level of education. District Elementary Education Plans (DEEP) across the country are being developed primarily based on the data generated though the information system developed for the SSA, i.e. the District Information System for Education (DISE). This section deals with the efforts made under DISE towards developing a school-based information system covering management and organization of information collection, dissemination and utilization, as also limitations and major areas of concern. A number of government and semi-government agencies are involved in the collection of information on educational variables. Among them the Department of Higher Education of the Ministry of Human Resource Development (MHRD), Government of India, is the main agency responsible for the collection of numeric information on regular basis. The MHRD collects information from all the recognized institutions of the country annually with 30th September as the reference date and school being the unit of data collection. MHRD publishes the state-specific information through its publication, namely Education in India. The latest available volumes of this publication covering various aspects are: 1999-2000, Volume I: Numeric Information; 1997-98, Volume II: Financial Data; and 1999-2000, Volume III: Examination Results. However, another publication, though a provisional one, titled Selected Educational Statistics, is the latest available for the year 2005-06.

> "District Elementary Education Plans across the country are being developed primarily based on the data generated though the information system developed for the SSA, i.e. the District Information System for Education"

The National Council of Educational Research and Training (NCERT) also collects information on special variables through its All India Educational Survey, once in every five to eight years with habitation as its unit of data collection. Full results of the Seventh Survey, with September 30, 2002 as its date of reference, were made available in 2007. The basic purpose of collecting information on special variables through the all-India school survey is to provide inputs for formulating five-year plans. It may also be noted that neither the MHRD nor NCERT disseminates full set of district-specific data; hence time-series data on key indicators is not available.

On the other hand, a number of semi-government agencies, like the National Sample Survey Organization (NSSO), Census of India, and the International Institute for Population Studies (National Family Health Survey), also from time to time collect information on a few educational variables as part of their regular household sample surveys. NSSO in addition conducts special survey on education through its Participation in Education series, 64th Round being the latest one. The Government of India through the Educational Consultants India Limited (Ed. CIL) and Indian Market Research Bureau (IMRB), had recently commissioned a nation-wide survey for estimating the out-of-school children of age group 6-14 years. Similarly, a non-government organization, *Pratham,* also conducts a household survey to estimate out-of-school children (6-13 years), facilities in schools and learning ability of children in the rural India. It has decided to conduct such surveys till 2010 (for details see Student Flow at Primary Level: A Study Based on DISE Data. MHRD, Government of India; and NUEPA, New Delhi, 2007). In addition, the Government of India through the Ed. CIL has also commissioned studies on student's attendance, drop-out rates and teacher's absence in primary and upper primary schools in a few select states. NCERT also conducted learner's assessment studies, both in case of primary and upper primary levels of education. It intends to monitor quality of elementary education through a set of formats that it has developed for SSA.

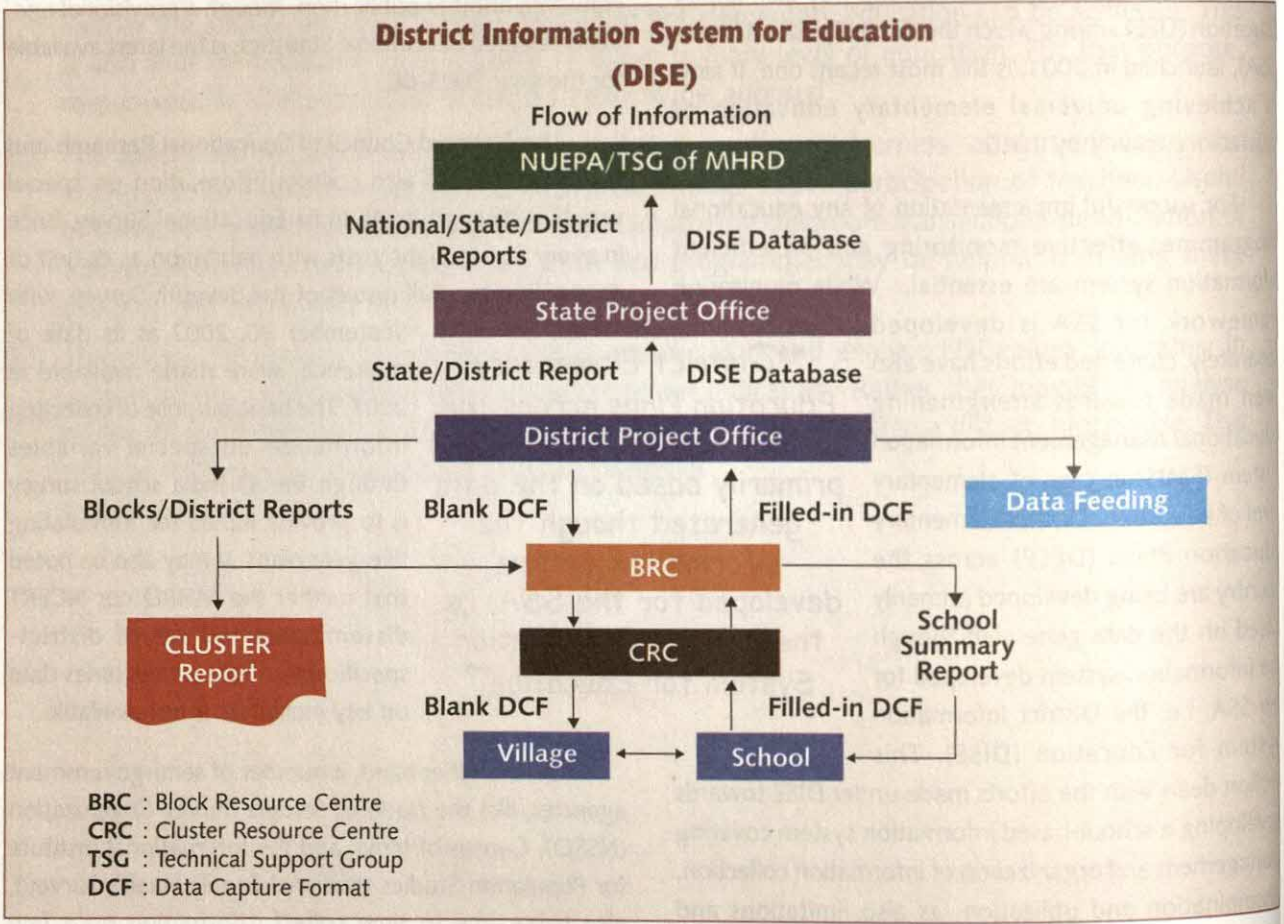


Figure 1.1 : Data Flow Diagram

Indian education system is one of the largest education systems in the world as it caters to the needs of more than 1,000 million people. In view of its size, the information system has certain limitations, both administrative and non-administrative. Some of these limitations are: (i) multiple data collection agencies and directorates involved in data collection and lack of coordination among them; (ii) lack of understanding of the concept and definitions of educational statistics; (iii) lack of adequate, qualified and trained staff at different levels; (iv) problems in distribution and collection of data-capture formats; (v) lack of district-specific time-series data; (vi) time-lag in data; (vii) reliability of education data; (viii) data gaps; (ix) lack of computers at lower levels; (x) creation of new districts and re-demarcation of boundaries of the existing districts; (xi) poor dissemination and utilization of data; and (xii) lack of accountability at different levels. Notwithstanding these limitations, the school statistics form the basis of planning, monitoring and evaluation of various aspects of education, in general, and primary and elementary education, in particular. The manual system of information collection under the MHRD even does not have uniform school format. Rather it has got consolidated sheets at different levels. In view of this, it is not possible to undertake validation of data at any level. The first consolidation of data takes place at the block level and in large blocks in view of a large number of schools; it is not an easy task to consolidate the data manually, especially when officers at this level are generally not properly trained to deal with huge amount of data.

Sporadic attempts have been made in the past to develop a computerized educational management information system in India. Of these, efforts made under the District Primary Education Programme (DPEP) and *Sarva Shiksha Abhiyan* (SSA) are apparently among the most successful ones. Most of the earlier attempts at the Central and State Governments levels failed to sustain and as such the overall situation remained a matter of concern. At the time of initiating District Primary Education Programme (DPEP) in 1994-95, it was felt that a sound information system was essential for successful monitoring and implementation of the programme. It was also realized that to strengthen educational statistical database for planning and management in a decentralized framework, an innovative model was needed. It was expressed that DPEP, with a focus on decentralized planning, required up-to-date and reliable school level information as soon as it was collected. It further reiterated, in the context of decentralization of primary education, the imperativeness of more efficient and effective school and community databases so that the signals relating to the trends in critical indicators could be tracked at various levels of decision-making. The MHRD in 1994-95, as a part of the DPEP national endeavour, decided to design and develop a school-based computerized information system, and entrusted the main responsibility to the National Institute of Educational Planning and Administration (NIEPA), New Delhi, (now National University of Educational Planning and Administration [NUEPA]).

> "NUEPA designed and developed the core Data-Capture Formats in consultation with the experts and states. Accordingly, NUEPA designed the software for implementation at the district level and provided necessary technical and professional support to all the districts"

In this background, a pilot project for revitalization of educational statistics in India was initiated at NUEPA during 1995 with financial assistance from UNICEF. The project aimed at examining issues related to identification of data needs, processes and procedures for data collection, developing a framework for data flows and computerization, and facilitating the use of educational indicators in planning, management, monitoring and evaluation. Such a comprehensive and integrated approach was necessitated by the fact that the then existing system could not provide the school level data in time and that it was highly limited in scope and coverage. Similarly, the use of educational statistics for planning and monitoring in the decentralized framework was also minimal. There were no systematic checks on the internal consistency of data. Data on many critical variables was either not collected at all or was not processed to facilitate decision-making. In tune with the spirit of the DPEP, district was selected as a nodal point for collection, computerization, analysis and use of school level data. NUEPA designed and developed the core Data-Capture Formats in consultation with the experts and states. Accordingly, NUEPA designed the software for implementation at the district level and provided necessary technical and professional support to all the DPEP districts.

The first version (dbase) of the software, named as 'District Information System for Education' (DISE), was released in the middle of 1995. The district level professionals were assisted and trained in the establishment of EMIS units. The first major review of the DISE software was undertaken during 1997-98 (PowerBuilder/SQL Anywhere). The software was later re-designed in 2001 in the light of requirements of the SSA (PowerBuilder/Oracle). Not only the coverage of DISE was extended to non-DPEP states but it was also expanded to cover the entire elementary level of education. In view of the state-specific requirements, NUEPA conducted workshops in 2005 and 2006 and sought suggestions about DISE format and software in the light of which DISE format as well as software was modified and made available to all the DISE users across the country. Efforts are being made to further improve the DISE software so as to make it complete user-friendly menu-driven software with emphasis on report module.

DISE 2001 Software: Main Features

The main features of DISE 2001 Software are briefly presented below:

- The system covers eight years of schooling in all recognized primary, upper primary and primary/upper primary sections of the secondary and higher secondary schools
- The concept and definitions of educational variables involved therein have been standardized at the national level and are uniformally followed by all districts and states.
- Manual aggregation of data at different levels is completely replaced by computerized data entry and report generation system.
- The system defines core data on school location, management, rural-urban, enrolment, buildings, equipment, teachers, incentives, medium of instruction, children with disabilities, examination results and student flows.

> **"What is more remarkable about DISE is that it has drastically reduced the time-lag in the availability of educational statistics which is now down from 7-8 years to about a year at the national level and only a few months at the district and state levels"**

- Detailed data on individual teachers, *para*-teachers, community teachers and their profile, including data on in-service training received, is collected and made available.
- The states/districts have flexibility of adding supplementary variables depending upon their specific requirements on year-to-year basis. No additional software for computerization and analysis of state/district specific data is required.
- The states/districts can develop their own large database using 'designer' module and integrate a variety of school/cluster/block level data with it. The software handles multiple databases at various levels and provides tools of data analysis and presentation.
- A large number of standardized reports on school-related variables and performanc indicators aggregated at the cluster, block and district levels, are generated by the software.
- DISE ensures two-way flow of information School Report Card for each school is generate for sharing with the school and members o Village Education Committee.
- DISE presents multi-user and modular system o software design for better management and security of databases.
- It responds to pre-define queries on standard aspects, lik school list, list of villages withou primary and upper primar schools, single-teacher schools schools with type of building schools with high PTR, etc.
- Data can be exported t many other formats for statistica and other analysis by users.

Major Outcome of DISE Efforts

- Through the concerted efforts, MIS Unit is no operational both at the district and state level and is equipped with necessary hardware an software.
- The DISE software is now operational in all th districts of the country (35 States & UTs) and i providing vital information for preparation o district elementary education plans.
- What is more remarkable about DISE is that i has drastically reduced the time-lag in th availability of educational statistics which is no down from 7-8 years to about a year at th national level and only a few months at th district and state levels.
- DISE has also eliminated data gaps a comprehensive information is now available o

all aspects of universal elementary education at different levels.

- As a part of DISE activities, District Report Cards on elementary education is being released annually, which contain cross-sectional data on a number of variables at the district level. State Report Cards are also being disseminated for the last five years. The Analytical Report containing detailed analysis of DISE data is also being published annually (see Table A1).
- A few states have extended the coverage of DISE to the unrecognized schools. A study based on the unrecognized schools of Punjab was recently brought out by NUEPA.
- Every effort is made to promote the use of DISE data for planning, management and monitoring of SSA through case studies, orientation and training workshops of educational planners and administrators. It has now become a regular feature to share the DISE data at different levels every year. At the national level, major findings of DISE data are being shared every year with planners, administrators, policy makers, educationists and other data users.
- Official website of DISE (http://dise.in) has been developed and is being updated frequently. District Report Cards and raw data in case of each of the district covered under DISE are uploaded along with other DISE publications. All the DISE publications are also available to users in a Compact Disk.
- As an online help to users, DISE group of users is formed on the Internet, which is very active. Users post problems of common interest to group for their solutions.
- The Government of India has recently constituted a committee to review educational statistics (including DISE activities), report of which is awaited. Most likely the committee may recommend expansion of DISE from elementary to secondary and higher secondary levels of education. In fact, a few states at their own have already expanded the coverage of DISE in their states. A few states have also decided to have DISE as the only source of information so far as elementary level of education is concerned. NUEPA has also undertaken a massive project to strengthen secondary education MIS.

> "Government of India has recently constituted a committee to review educational statistics report of which is awaited. Most likely the committee may recommend expansion of DISE from elementary to secondary and higher secondary levels of education"

In addition to the annual publications mentioned above (see Table A1), the Union Minister of Human Resource Development recently released School Report Cards of more than one million primary and upper primary schools/sections, based on DISE data. Besides quantitative information, the Report Cards also provide qualitative information and a descriptive report about individual schools. All that can now be accessed with the click of a mouse (http://schoolreportcards.in). Option of downloading raw data, of late is also being provided to users so that empirical studies based on DISE data can be undertaken.

Through the DISE Flash Statistics: 2006-07, an effort has been made to compute an Educational Development Index based on DISE data and states are ranked accordingly. To facilitate computation of district-specific EDIs, NUEPA recently conducted workshop to orient state level officers towards computation of an EDI. It is hoped that EDI will help decide the future course of investment on elementary education.

Though over time, data utilisation has improved, which is reflected in the District Elementary Education Plans developed under the aegis of *Sarva Shiksha Abhiyan,* yet there is still scope for further improvement. Efforts have been made to create demand for the DISE data. All the DISE publications have been made available to a large number of university libraries, research and resource institutions, educationists, planners, administrators, policy makers and other data users across the country which has created awareness about the DISE data. Through concerted efforts, it is hoped that demand for DISE data will be generated in years that follow.

Table A1

DISE : Annual Publications

- Elementary Education in India: Progress towards UEE: DISE Flash Statistics
- Elementary Education in India: Where do we stand?, District Report Cards, Volume I
- Elementary Education in India: Where do we stand?, District Report Cards, Volume II
- Elementary Education in India: Where do we stand?, State Report Cards
- Elementary Education in India: Progress towards UEE, Analytical Report
- Elementary Education in India: Progress towards UEE, Analytical Tables
- Elementary Education in Rural India: Analytical Tables
- Elementary Education in Urban India: Analytical Tables
- CD Containing DISE Publications
- Websites : www.schoolreportcards.in
  www.dise.in

DISE : Coverage

Initially, 42 districts across seven DPEP phase-one states, namely Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu, were covered under DISE. The number of districts covered has gradually increased with the expansion of the DPEP as the districts included under phase-two and three have also been covered. At the end of 2001, more than 270 districts spread over 18 states of the country had adopted DISE. With the launching of the *Sarva Shiksha Abhiyan* in 2001, the scope of DISE was enlarged to cover the entire elementary level of education, embracing all the districts of the country. Even prior to SSA, a number of DPEP states expanded the coverage of DISE to their non-DPEP districts. In 2002-03, the coverage was further expanded to 461 districts across 18 states. However, the coverage was confined only to DPEP states. During 2003-04, the coverage was further widened to bring in its fold as many as 539 districts (including bifurcate districts) across 25 States & UTs of the country (Tabl A2). It was for the first time that seven non-DPEP state i.e. Chandigarh, Manipur, Meghalaya, Mizoram Nagaland, Punjab and Tripura adopted DISE during 2003 04. During 2004-05, four more States and UTs, i.e Arunachal Pradesh, Delhi, Jammu & Kashmir, an Puducherry, were covered under DISE. By the year 2005 06, all the districts of the country spread over all th 35 States and UTs had been covered for the firs time under DISE (see Figure 1.2). During 2006-0 (*as on 30th September 2006*), the number of district covered under DISE further increased to 60 compared to 604 in 2005-06.

Publications

The District Report Cards: 2006-07 and the Stat Report Cards: 2006-07 are being published separatel (*Elementary Education in India: Where do we stand District Report Cards: 2006-07, Volume I & II;* an *Elementary Education in India: Where do we stand State Report Cards: 2006-07,* NUEPA an Government of India, New Delhi). In addition, DIS Flash Statistics: 2006-07 containing state-specific ke indicators was also released recently. Thus, the state wise DISE data is now available for five years and th district-wise data for more than seven years. The dat is also available on the official website of DISE, i.e http://dise.in.

Table A2
DISE : 2006-07 : Coverage

Sl. No.	State/UT	School Structure		Number of Districts				
					Reported DISE Data			
		Primary	Upper Primary	2001 Census	2003-04	2004-05	2005-06	2006-07
1	Andaman & Nicobar Islands	I-V	VI-VIII	2	–	–	2	3
2	Andhra Pradesh	I-V	VI-VIII	23	23	23	23	23
3	Arunachal Pradesh	I-V	VI-VIII	13	–	15*	15*	16*
4	Assam	I-IV	V-VII	23	23	23	23	23
5	Bihar	I-V	VI-VIII	37	37	37	37	37
6	Chandigarh	I-V	VI-VIII	1	1	1	1	1
7	Chhattisgarh	I-V	VI-VIII	16	16	16	16	16
8	Dadra & Nagar Haveli	I-IV	V-VII	1	–	–	1	1
9	Daman & Diu	I-IV	V-VII	2	–	–	2	2
10	Delhi	I-V	VI-VIII	9	–	9	9	9
11	Goa	I-IV	V-VII	2	–	–	2	2
12	Gujarat	I-IV	V-VII	25	25	25	25	25
13	Haryana	I-V	VI-VIII	19	17+	19	19	20
14	Himachal Pradesh	I-V	VI-VIII	12	12	12	12	12
15	Jammu & Kashmir	I-V	VI-VIII	14	–	12+	14	14
16	Jharkhand	I-V	VI-VIII	18	22*	22*	22*	22*
17	Karnataka	I-IV	V-VII	27	27	27	27	27
18	Kerala	I-IV	V-VII	14	14	14	14	14
19	Lakshadweep	I-IV	V-VII	1	–	–	1	1
20	Madhya Pradesh	I-V	VI-VIII	45	45	45	48*	48*
21	Maharashtra	I-IV	V-VII	35	35	35	35	35
22	Manipur	I-V	VI-VIII	9	–	–	9	9
23	Meghalaya	I-IV	V-VII	7	7	7	7	7
24	Mizoram	I-IV	V-VII	8	8	8	8	8
25	Nagaland	I-V	VI-VIII	8	8	8	8	8
26	Orissa	I-V	VI-VII	30	30	30	30	30
27	Puducherry	I-V	VI-VIII	4	–	4	4	4
28	Punjab	I-V	VI-VIII	17	17	17	17	19
29	Rajasthan	I-V	VI-VIII	32	32	32	32	32
30	Sikkim	I-V	VI-VIII	4	4	4	4	4
31	Tamil Nadu	I-V	VI-VIII	30	29	29	30	30
32	Tripura	I-V	VI-VIII	4	4	4	4	4
33	Uttar Pradesh	I-V	VI-VIII	70	70	70	70	70
34	Uttarakhand	I-V	VI-VIII	13	13	13	13	13
35	West Bengal	I-IV	V-VIII	18	20*	20*	20*	20*
	Number of Districts	–	–	593	539*	581*	604*	609*

* Including bifurcated districts.

+ Data for all districts not reported.

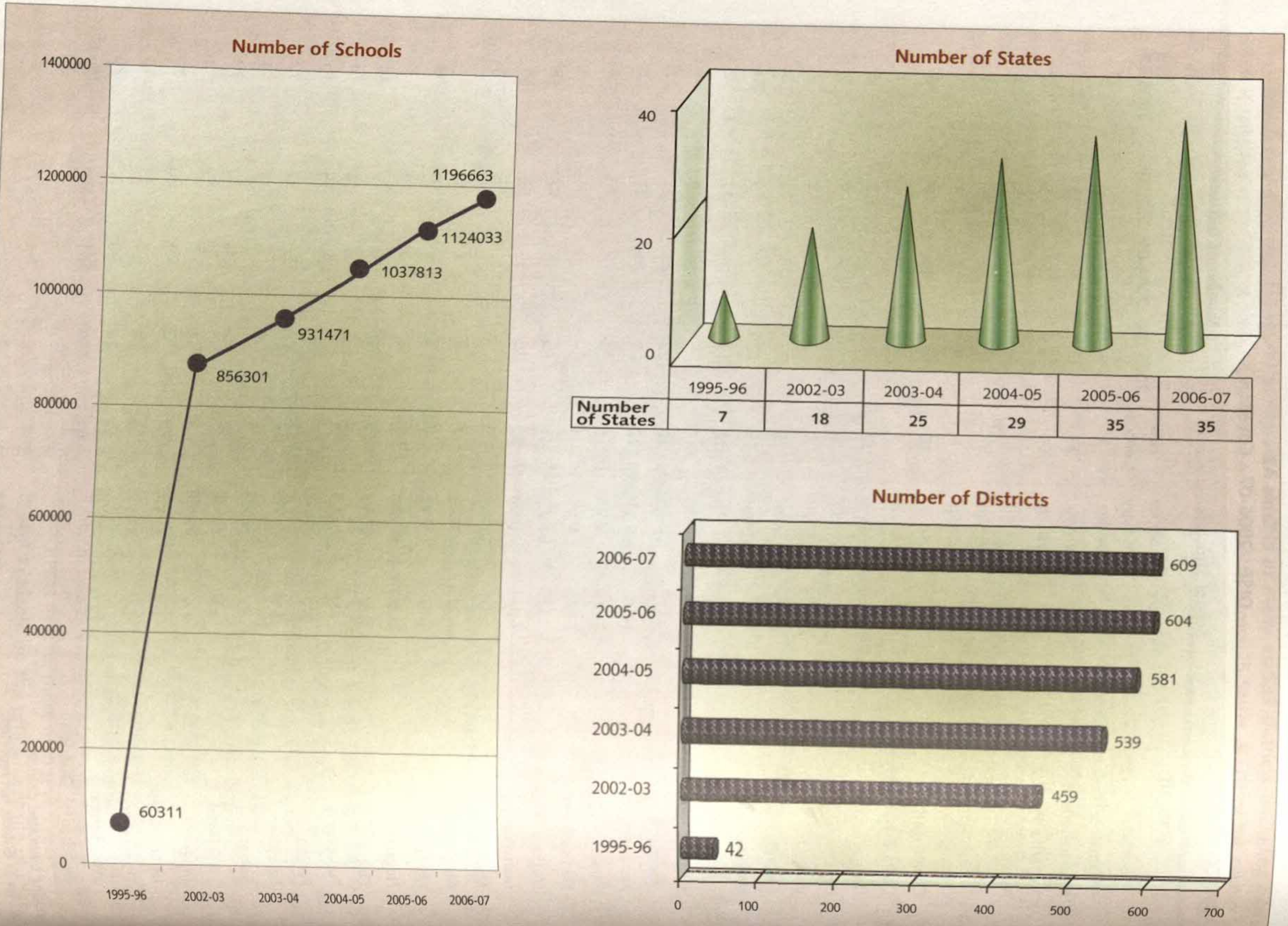


Figure 1.2 : DISE Coverage

Table A3
DISE 2006-07: State Summary

Sl. No.	State/UT	Data Reported From					
		Districts	Blocks	Villages	Schools	Enrolment**	Teachers
1	A & N Islands	3	9	196	350	52426	3521
2	Andhra Pradesh	23	1128	25666	100932	11306819	511579
3	Arunachal Pradesh	16*	79	2753	3412	276457	12829
4	Assam	23	145	22037	63996	5422711	221047
5	Bihar	37	532	32471	54884	15120547	237449
6	Chandigarh	1	20	20	178	125123	5353
7	Chhattisgarh	16	146	22298	48968	4195222	155652
8	D & N Haveli	1	1	70	276	46699	1038
9	Daman & Diu	2	2	41	86	20858	637
10	Delhi	9	28	413	4742	2344914	93657
11	Goa	2	11	626	1420	164963	6854
12	Gujarat	25	230	19615	38472	7540861	216564
13	Haryana	20	119	7603	16180	2492009	78157
14	Himachal Pradesh	12	118	9995	16614	1081599	59143
15	Jammu & Kashmir	14	200	6985	20711	1628930	101959
16	Jharkhand	22*	212	28480	40618	6355016	131646
17	Karnataka	27	180	27473	55364	7889506	249971
18	Kerala	14	165	1921	12183	3401987	127672
19	Lakshadweep	1	8	10	30	8082	417
20	Madhya Pradesh	48*	316	53958	125858	15182309	398744
21	Maharashtra	35	378	42728	86429	15342625	552369
22	Manipur	9	35	2117	3869	462190	22650
23	Meghalaya	7	44	5433	9268	539515	29873
24	Mizoram	8	36	813	2782	226923	16025
25	Nagaland	8	49	1276	2537	471439	21075
26	Orissa	30	418	34922	51198	4927827	150692
27	Puducherry	4	6	365	668	179739	7612
28	Punjab	19	142	12773	20950	2702272	85118
29	Rajasthan	32	341	37767	100965	12462231	396930
30	Sikkim	4	9	855	1226	121995	9779
31	Tamil Nadu	30	412	19273	52423	9776589	360463
32	Tripura	4	45	951	3679	697525	31013
33	Uttar Pradesh	70	966	90804	168969	32162514	608638
34	Uttarakhand	13	102	11489	19161	1269903	49326
35	West Bengal	20*	483	38612	67265	13342492	263126
	All States	**609**	**7115**	**562809**	**1196663**	**179342817**	**5218578**

* Including bifurcated districts.
**Enrolment as per school structure.

State-wise number of blocks, villages, schools etc, from which data is received is presented in Table A3. The Analytical Report: 2006-07 is divided into two parts: first part presents analysis of data, whereas, the part two presents state-wise information on key indicators. The indicators analyzed and tables presented are organised into School and Facility Indicators, Teacher-Related Indicators and Enrolment-Related Indicators. The Tables contain information on a large number of variables, mostly presented by school category and wherever necessary by rural and urban areas, and management category. Indicators required for formulating reliable elementary education plans are presented *in a ready-to-use form*. Wherever necessary, time-series data is also presented either at the national and/or state level.

Except on quality of education, comprehensive information is presented on all the aspects of universalisation. Examination results in the terminal Grades IV/V and VII/VIII are considered as proxy indicator of achievement levels and the same is presented separately in the case of boys and girls. An attempt has also been made to compute indicators of internal efficiency of education system, which are based on DISE 2005-06 and 2006-07 data. More specifically, the analysis covers the following important areas of elementary education:

> "Indicators analyzed and tables presented are organised into School and Facility Indicators, Teacher-Related Indicators and Enrolment-Related Indicators"

a) Number of schools, enrolment, and teachers, classified by school category and school management

b) Examination results for the previous academic session for the terminal classes at primary and upper primary levels of education

c) Classrooms, categorized into good condition, requiring minor repair, and requiring major repair by school category

d) Number of schools by category and by type of buildings

e) Sex-wise enrolment of children with disabilities at primary and upper primary levels

f) Gender and caste distribution of regular and *para-teachers* and the proportion of teachers undergoing in-service teacher training during the pervious year

g) Distribution of regular and *para-teachers* by educational and professional qualifications and by school category

h) Enrolment by school category

i) Performance indicators in terms of school category; ratio of primary to upper primary schools/ sections; enrolment distribution: total, Scheduled Castes, Scheduled Tribes and Other Backward Class and Muslim minority, percentage female enrolment; gender-parity index; schools with attached pre-primary classes; percentage of under-age and over-age children in primary and upper primary classes; apparent survival rate at primary level, dropout and retention rates, and transition rate from primary to upper primary level; and

j) Quality indicators according to category of schools; teacher-pupil ratio; students-classroom ratio; availability of drinking water, common toilet, and girl's toilet in school.

The main indicators presented in the Analytical Report/Tables have been derived by using the following illustrative formulae. The formulae are given for schools in the primary category only. The same method is applied for other categories and classification groups.

1. $$\%\ \text{Single–classroom schools} = \frac{\text{Primary schools having single classroom}}{\text{Total primary schools}} \times 100$$

2. $$\%\ \text{Single–teacher schools} = \frac{\text{Primary schools with single teacher in position}}{\text{Total primary schools}} \times 100$$

3. % Schools with SCR $\geq$ 60 =

$$\frac{\text{Primary schools having student classroom ratio} \geq 60}{\text{Total primary schools}} \times 100$$

4. % Schools with pre-primary sections =

$$\frac{\text{Primary schools having pre-primary sections}}{\text{Total primary schools}} \times 100$$

5. % Schools with common toilet =

$$\frac{\text{Primary schools having common toilet}}{\text{Total primary schools}} \times 100$$

6. % Schools with girls' toilet =

$$\frac{\text{Primary schools having girls' toilet}}{\text{Total primary schools}} \times 100$$

7. % Enrolment in government schools =

$$\frac{\begin{array}{c}\text{Enrolment in primary schools having Education}\\ \text{Department, Local Body, Tribal Welfare Department}\\ \text{\& others as school management}\end{array}}{\text{Total enrolment in primary schools}} \times 100$$

8. % Enrolment in private schools =

$$\frac{\begin{array}{c}\text{Enrolment in primary schools having private aided}\\ \text{and private unaided as school management}\end{array}}{\text{Total enrolment in primary schools}} \times 100$$

9. % Enrolment in single-teacher schools =

$$\frac{\text{Enrolment in primary schools having single teacher}}{\begin{array}{c}\text{Enrolment in total number of schools}\\ \text{having primary category}\end{array}} \times 100$$

10. % No-female teacher schools (teacher $\geq$ 2) =

$$\frac{\begin{array}{c}\text{Primary schools having teacher} \geq 2 \text{ but}\\ \text{no female teacher}\end{array}}{\text{Total primary schools}} \times 100$$

11. % Students in schools without building =

$$\frac{\text{Enrolment in primary schools having no building}}{\text{Enrolment in primary schools}} \times 100$$

12. % Under-age & over-age children =

$$\frac{\text{Enrolment in Grades I-V below '6' \& above '11' years}}{\text{Total enrolment in Grades I-V}} \times 100$$

13. % SC enrolment =

$$\frac{\text{Enrolment of SC in primary classes}}{\text{Total enrolment in primary classes}} \times 100$$

14. % SC girls to SC enrolment =

$$\frac{\text{Enrolment of SC girls in primary classes}}{\text{SC enrolment in primary classes}} \times 100$$

15. % ST enrolment =

$$\frac{\text{Enrolment of ST in primary classes}}{\text{Total enrolment in primary classes}} \times 100$$

16. % Muslim enrolment

$$= \frac{\text{Enrolment of Muslim minority in primary classes}}{\text{Total enrolment in primary classes}} \times 100$$

17. % ST girls to ST enrolment

$$= \frac{\text{Enrolment of ST girls in primary classes}}{\text{ST enrolment in primary classes}} \times 100$$

18. Pupil–Teacher Ratio (PTR)

$$= \frac{\text{Total enrolment in schools of primary category}}{\text{Total teachers in schools of primary category}}$$

(*Para*-teachers have been included while calculating PTR)

19. Student–Classroom Ratio (SCR)

$$= \frac{\text{Total enrolment in primary schools}}{\text{Total classrooms in primary schools}}$$

20. % Schools with ≤ 50 students in Grades I – IV/V

$$= \frac{\text{Number of primary schools having enrolment} \leq 50 \text{ in Grades I – IV/V}}{\text{Total primary schools}} \times 100$$

21. % Schools with PTR ≥ 100

$$= \frac{\text{Total primary schools having PTR} \geq 100}{\text{Total primary schools}} \times 100$$

22. % Female teachers

$$= \frac{\text{Total female teachers in primary schools}}{\text{Total teachers in primary schools}} \times 100$$

(*Para*-teachers have been included while calculating this indicator)

23. % of Primary schools established =

$$\frac{\text{Total primary schools established since 1994}}{\text{Total primary schools}} \times 100$$

(The denominator excludes those schools for which year of establishment is not given)

24. Flow Rates

(a) *Promotion Rate*

$$(P^{t}_{g}) = \frac{P_{g+1}^{t+1}}{E_{g}^{t}} \times 100$$

where

P_{g+1}^{t+1} = Number of students promoted to Grade 'g+1' in year 't+1', and

E_{g}^{t} = Total number of students in Grade 'g' in year 't'.

(b) *Repetition Rate*

$$(r^{t}_{g}) = \frac{R_{g}^{t+1}}{E_{g}^{t}} \times 100$$

where

$$R_g^{t+1} = \text{Number of repeaters in Grade 'g' in year 't+1'}$$

(c) *Dropout Rate*

$$(d_g^t) = \frac{D_g^t}{E_g^t} \times 100$$

where

$$D_g^t = \text{Number of student's dropping out from Grade 'g' in year 't'}$$

(The flow rates have been computed by using the enrolment and repeaters data in schools which are common in both the years, i.e. 2005-06 and 2006-07.)

(d) Transition Rate (TR)

$$TR = \frac{E_{g+1}^{t+1}}{E_g^t} \times 100$$

where

E_{g+1}^{t+1} = New entrants into Grade V/VI in year 't+1' and

E_g^t = Enrolment in Grade IV/V in year 't'

(e) *Retention Rate (RR)*

$$RR = \frac{\text{Enrolment in Grade IV/V in year 't' – Repeaters in Grade IV/V in year 't'}}{\text{Enrolment in Grade I in year 't – 3'/'t – 4'}} \times 100$$

25. Average promotion, repetition and dropout rates present average of these rates in primary classes and are calculated by using the standard methods.

26. Gender Parity Index (GPI) $= \dfrac{\text{Girl's enrolment in primary grades in year 't'}}{\text{Boy's enrolment in primary grades in year 't'}}$

27. Ratio of Primary to Upper Primary Schools/Sections $= \dfrac{\text{Total number of primary schools/sections in year 't'}}{\text{Total number of upper primary schools/sections in year 't'}}$

28. Gross Enrolment Ratio (GER) $= \dfrac{\text{Total enrolment in Grades I-V}}{\text{Population of age 6-11 years}} \times 100$

29. Net Enrolment Ratio (NER) $= \dfrac{\text{Enrolment, Grades I-V/6-11 age group}}{\text{Population of age 6-11 years}} \times 100$

30. Input per graduate presents average number of years an education system is taking in producing primary graduate which is based upon the *Reconstructed Cohort Method* by assuming that no child will repeat a grade more than three times;

31. In-service training, school & TLM grants received, examination results etc. are presented for the previous academic year;

32. Percentage of teachers in different age groups is presented only for teachers under government managements; and

33. Average number of days teachers spent on non-teaching assignments is applicable to only those teachers who were assigned non-teaching assignments and not to all teachers.

Concerns about Quality of Data

Raw data presented in the document or used for calculating indicators are essentially based on data provided by the States and UTs through annual data collection under SSA (DISE). NUEPA is committed to provide professional and software support to all States and UTs as well as for dissemination and analysis of the data as it is provided by the individual States and UTs. In no way, it is involved in data collection as such and therefore, the accuracy and truthfulness of the data rest with the States and UTs.

> "Procedures for the data validation and verification of sample data capture formats at the district level have been prescribed, and the districts reported the steps taken by them to ensure quality and reliability of data collection"

The data is provided by the State Project/Mission Directors through the Technical Support Group of the Department of School Education and Literacy, MHRD. The data was supposed to be first cross-checked and validated at the district and then at the state level. Before that, the Cluster Resource Centre Coordinator was supposed to thoroughly check the filled-in formats received from the schools falling under his or her jurisdiction. CRC coordinators are made accountable to ensure that data is consistent and there are no missing values. Before the formats were passed on to the block level, they were also supposed to ensure that the coverage was complete and to certify that the data was free from all inconsistencies. Similarly, consistency module provided in the DISE software was required to run at the district level. After the state was satisfied with the quality and reporting of the data, the data was submitted for dissemination and analysis at the national level. From the national level, feedback on data quality was provided to all the States and UTs.

Procedures for the data validation and verification of sample data capture formats at the district level have been prescribed, and the districts reported the steps taken by them to ensure quality and reliability of data collection. The DISE software also checks for internal inconsistencies in the data and generates reports for verification by the District Project Office. The State Project Office while transferring the data from the district to the state database ensures that the data received from the district is complete and free from any inconsistency. Most of the states have engaged an independent agency for sample checking of data. At the national level, data from the State Project Office is received to ensure compliance with various quality control measures. Despite these efforts, some inconsistencies and missing data are observed at the national level. A few schools have not responded to all the classificatory variables like management, year of establishment, rural/urban classification, school category, building status, academic and professional qualifications of teachers, and caste and sex code for teachers. Wherever possible, efforts are made to analyse the data by excluding the no-response values. However, in some cases, the 'no-responses' are explicit from the tables and hence the totals may not match across various tables due to different number of no-responses. In cross-tabulation analysis, the no-responses are excluded.

Needless to mention that the percentages, rates and ratios presented in the report are based on the schools that have responded to a particular question and hence may not be applicable to the entire state. Thus, schools by management, there location in rural and urban areas, type of schools, schools by category, enrolment (general, SC. ST, OBC, Muslim and by medium of instructions), pupil-teacher ratio, student-classroom ratio, percentage of girls in primary and upper primary classes and other such indicators should therefore be viewed in the light of these limitations.

Over a period of time, the number of schools covered under DISE increased significantly. During 2006-07, data has been collected from more than 1.2 million schools, with a comprehensive profile of more than 5.2 million teachers also being maintained by DISE. Despite best efforts, it is still possible that the field agencies might have not covered all the recognised schools imparting elementary education supposed to be covered under DISE which is specifically true for schools under private managements. A few districts have collected data from these schools while others might not have covered all such schools. Despite significant increase in number of private schools covered under DISE (225 thousand in 2006-07), field level functionaries reported that data from a few private un-aided schools couldn't be obtained for the one or the other reason. We are trying to reach all such schools and are hopeful that these efforts will be reflected in the following year. In addition, un-recognised schools are not supposed to be covered under DISE which in a few states may be in large numbers. However, states like Andhra Pradesh and Punjab have extended the coverage of DISE to un-recognised schools in their states and collected information by using the DISE Data Capture Format. NUEPA would be happy to provide assistance to states extending coverage of DISE to un-recognised schools in their states.

> "Un-recognised schools are not supposed to be covered under DISE which in a few states may be in large numbers. States like Andhra Pradesh and Punjab have extended the coverage of DISE to un-recognised schools in their states and collected information by using the DISE Data Capture Format"

It has also been observed that a few schools did not report age and grade matrix which is crucial in knowing the status of elementary education. A few states even did not report enrolment of Grade VIII because of composition of school structure in the state. Therefore, enrolment in upper primary classes does not present the complete picture in Grades VI-VIII; thus GER and NER may not give correct portrayal of universalisation in such states and the same may be considered as percentage of children of an age-group enrolled in schools that reported data under DISE. The remaining children may either be out-of-school or enrolled in unrecognized schools, Education Guarantee Schools (EGS), non-formal education centers and other learning centers not covered under DISE. Irrespective of the school structure, enrolment ratio at the Primary level is based on Grades I-V and of the Upper Primary level, Grades VI-VIII. The single-age projected population provided by the Office of the Registrar General of India has been used in estimating child population. An attempt has also been made to compute flow rates in case of States and UTs having DISE data for more than two years. While analysing the flow rates, it is noticed that in some cases the data is inconsistent which is also true for apparent survival, retention and transition rate. Indicators in case of such States and UTs have not been reported.

Random Checking of Data

With an aim to further improve the quality and reliability of data, it has been made mandatory for all the States & UTs to get the DISE data sample checked by an independent agency from the year 2006-07 onwards, for which NUEPA suggested the sampling methodology and developed a special data capture format for post enumeration survey. It is heartening to note that as many as 23 states initiated random sample checking of data in its very first year, most of which are conducted by the monitoring institutions (ICSSR funded institutions) identified for the states (see Table A4). However, in a few states the task was entrusted to private agencies. It is hoped that more such institutions will be entrusted the task of sample checking of DISE data in year that follows and the quality of reports would also

Table A4
Information about Five Percent Random Sample Checking of Data : 2006-07

S. No.	State/UT	Number of Districts	Number of Sample Districts	Total Number of Blocks	Number of Sample Blocks	Number of Sample Schools	Agency Conducted Post Enumeration Survey
1	Andhra Pradesh	23	5	260	38	770	National Institute of Rural Development, Hyderabad
2	Arunachal Pradesh	15	2	11	11	31	SSA Monitoring Institute, Rajiv Gandhi University, Itanagar
3	Assam	23	3	19	19	301	Institute of Advanced Study in Science and Technology, Guwahati
4	Bihar	37	6	81	81	449	Association of Social Engineering Research and Training, Patna
5	Chandigarh	1	1	1	1	9	State Institute of Education, Chandigarh
6	Chhattisgarh	16	2	57		6275	Nandi Foundation, Baster and Pratham, Raipur
7	Gujarat	25	4	38	38	303	Centre of Advanced Study in Education, M.S. University of Boroda, Vadodara
8	Haryana	20	2	9	9	50	State Institute of Educational Management and Training, Bhiwani
9	Himachal Pradesh	12	2	25	25	162	M/S Software Solutions, Shimla
10	Jammu & Kashmir	14	2	25	25	130	Directorate of Economics and Statistics, Jammu & Kashmir
11	Karnataka	27	3	33	25	260	Centre for Multi-Disciplinary Development and Research, Dharwad Regional Institute of Education, Mysore
12	Madhya Pradesh	48	4	26	26	417	Madhya Pradesh Institute of Social Science Research, Ujjain
13	Maharashtra	35	8	19	21	319	Swami Vivekananda Gram Vikash Bahu-Uddeshiyya Sevabhavi Sanstha, Beed Sayyam Sevabhavi Sanstha, Latur Gramin Vikas Shikshan and Krida Prasarak Mandal, Khadki, Akola
14	Meghalaya	7	7	44	–	459	Department of Education, North-Eastern Hill University and Shillong Lumparing Thrift and Credit Society, Shillong
15	Mizoram	8	1	37	4	10	District Resource Group, Education Department, Mizoram University
16	Orissa	30	3	50	44	312	Dr P.M. Institute of Advanced Study in Education, Sambalpur
17	Punjab	17	2	2	2	128	The American India Foundation Trust, Chandigarh
18	Rajasthan	32	32	–	–	1803	Centre for Development Communication and Studies, Jaipur
19	Sikkim	4	2	52	52	2020	State Institute of Education, Gangtok
20	Tamil Nadu	30	3	58	–	322	Alagappa University, Karaikudi
21	Tripura	4	2	22	9	41	Monitoring and Evaluation Cell, Tripura University, Agartala
22	Uttarakhand	13	13	101	39	435	Academy of Management Studies, Dehradun
23	West Bengal	20	2	50	6	335	Department of Adult, Continuing Education and Extension, Palli Samgathana Vibhaga

Source : State reports.

improve. NUEPA is planning to conduct a workshop of data users in which sample checking of data will also be discussed and monitoring institutions would be invited to participate in the workshop.

The main objectives of sample checking were to judge the accuracy of data and to identify the gaps and weaknesses and seek suggestions regarding remedial measures for strengthening the system and for further improving the quality of data. A sample of 10 percent of districts with a minimum of 2 districts in each state was suggested to be drawn. Depending upon the total number of blocks in a district, a sample of 3 to 4 blocks was recommended for selection. While selecting the sample blocks, due consideration was given to the present status of educational development in terms of literacy rate, rural/urban areas and proportion of SC and ST population; and within each sample block, a random sample of 5 percent of the total schools was selected. A careful examination of reports reveals that only in the case of a few variables, such as enrolment and examination results, the deviation noticed in post-enumeration and DISE data is found significant and in case of other variables, such as school particulars and infrastructure facilities, only a little deviation is noticed. In a few states, such as Tamil Nadu, no deviation is observed in case of the most of the variables included in the post-enumeration survey. Some of the suggestions provided by the institutions, who conducted PES, are summarized below:

> **"With an aim to further improve the quality and reliability of data, it has been made mandatory for all the States to get the DISE data sample checked by an independent agency from the year 2006-07 onwards"**

- Keep DISE format short and simple. School particulars, post sanctioned budget release etc, should be collected from the authorities at block/district level.
- DISE format may also include some qualitative variables concerning problems of students, teachers and parents, effectiveness of teaching etc.
- VEC and PTA members should be involved in the process of data collection, dissemination and utilization. BRC and CRC Coordinators should visit the schools frequently.
- Training on DISE once in a year is not sufficient. Rigorous and quality training should be arranged for teachers and teachers preferably with mathematics background be involved in data collection.
- There is a need for frequent monitoring and validation of information at the grassroots level. Nevertheless, scrutiny of DISE formats, preferably at the cluster level, is needed to be made mandatory.
- All the schools covered under DISE have been provided school report cards. The District Project Coordinators should ensure sharing of report cards with the head teachers, CRC and village community.
- MIS Unit at the district level should be strengthened and it be provided with sufficient staff.
- Time-lag between DISE and PES should be minimized. States should be requested to initiate corrective measures in the light of findings and recommendations of the PES.

I LOVE MY
'INDIA'

School & Facility Indicators

Introduction

One of the important components of universalisation of education is universal access, which is measured in terms of availability of Primary and Upper Primary schools/ sections within a distance of one and three km respectively from the habitation. Apart from distance, opening of school is also linked to population size of habitation which is 300 and 500 and more respectively in case of Primary and Upper Primary schools. The national norms of distance and population size are indicative in nature as the states have their own norms in view of hilly areas, bordering districts, difficult areas, SC and ST dominant areas etc.

> "Total number of schools covered under DISE increased from 8,53,601 in 2002-03 to 11,96,663 in 2006-07; thus showing an increase of 3,43,062 schools which is 40.19 percent of total schools in 2002-03"

Since 1950, the country has made significant progress towards making available schooling facilities in general and Primary and Upper Primary schools/sections in particular. Hence over a period of time, the number of schools across the country has increased many-fold which is also evident from the percentage of habitations served by the Primary and Upper Primary schools/sections as per the data generated by the NCERT through its all-India educational survey. It is also true for the percentage of rural population served by the schooling facilities. Schooling facilities might have further significantly improved since 2002, the year in which NCERT conducted Seventh Survey. It is also important to note that activities under SSA got momentum from the year 2002 onwards and a large number of Primary and Upper Primary schools/sections have been opened across the country which is also reflected in the ratio of Primary to Upper Primary schools/sections.

In this section, a variety of school and facility-related indicators in respect of five school categories, that is, (i) Primary; (ii) Primary with Upper Primary; (iii) Primary with Upper Primary, Secondary & Higher Secondary; (iv) Independent Upper Primary; and (v) Upper Primary with Secondary & Higher Secondary, for all the 35 States & UTs, and the average of all states covered under DISE in 2006-07, together with selected indicators for previous years, are presented. DISE mandate being to collect information from all the recognized institutions imparting elementary education (Classes I to VIII), irrespective of the school type; the six management types, by which information has been analysed are Department of Education, Local Body, Tribal and Social Welfare Departments and Private Aided, Private Unaided, and Other Managements. Wherever necessary, an indicator is also separately presented for all the Government (Department of Education, Local Body, Tribal & Social Welfare Departments and Other managements) and Private (Aided and Unaided) managements together as well as separately for rural and urban areas. Other managements are in fact the Government managements but are not included in the first three managements presented above.

First, the total number of schools is presented. It is followed by ratio of Primary to Upper Primary schools/sections by school management. While calculating the ratio, all the Primary schools/sections are added together and then divided by the total number of all schools/sections imparting Upper Primary education. This is followed by percentage distribution of schools by management and schools located in the rural areas. Distance from the Cluster Resource Centre (CRC) is the next indicator that is analysed by distance slabs, followed by a few other indicators, such as schools visited by CRC coordinators, average number of classrooms, single-classroom and single-teacher schools, schools with enrolment below 50, and schools with classroom ratio above 60, all of which reveal useful information on different aspects of universalisation of elementary education. Presence of schools does not necessarily mean that all of them have minimum essential facilities required for smooth functioning and also for effective teaching-learning transaction. In addition to the above mentioned indicators, the following set of facility indicators have also been analysed: availability and type of drinking water facility in schools, common toilet and girls' toilet facility in schools, and availability of kitchen-shed, ramps and usable computers in schools. Further, pre-primary sections in schools, use of school building as shift school and residential schools, as well as, schools that received school development and TLM grants, have also been analysed briefly. First, number of schools over a period of time (2002-03 to 2006-07) by school category is briefly analysed.

Number of Schools

The total number of schools covered under DISE over a period of time increased from 8,53,601 in 2002-03 to 11,96,663 in 2006-07; thus showing an increase of 3,43,062 schools which is 40.19 percent of total schools in 2002-03 (Table B1). Table B1 reveals that the percent share of schools in the rural areas during the period 2002-03 to 2006-07 has remained almost stagnant. Of as many as 11,96,663 schools covered from 609 districts across 35 States and UTs in 2006-07, nearly 87.15 percent schools are located in the rural areas. During the previous year 2005-06, information from 11,24,033 schools covered from 604 districts across 35 States and UTs was received. Of these 87.23 percent schools were located in the rural areas. A cursory look at the distribution of schools reveals that almost a similar pattern prevails in most of the States and UTs, with the majority of schools located in the rural areas.

Table B1

Distribution of Schools by School Category : 2002-03 to 2006-07

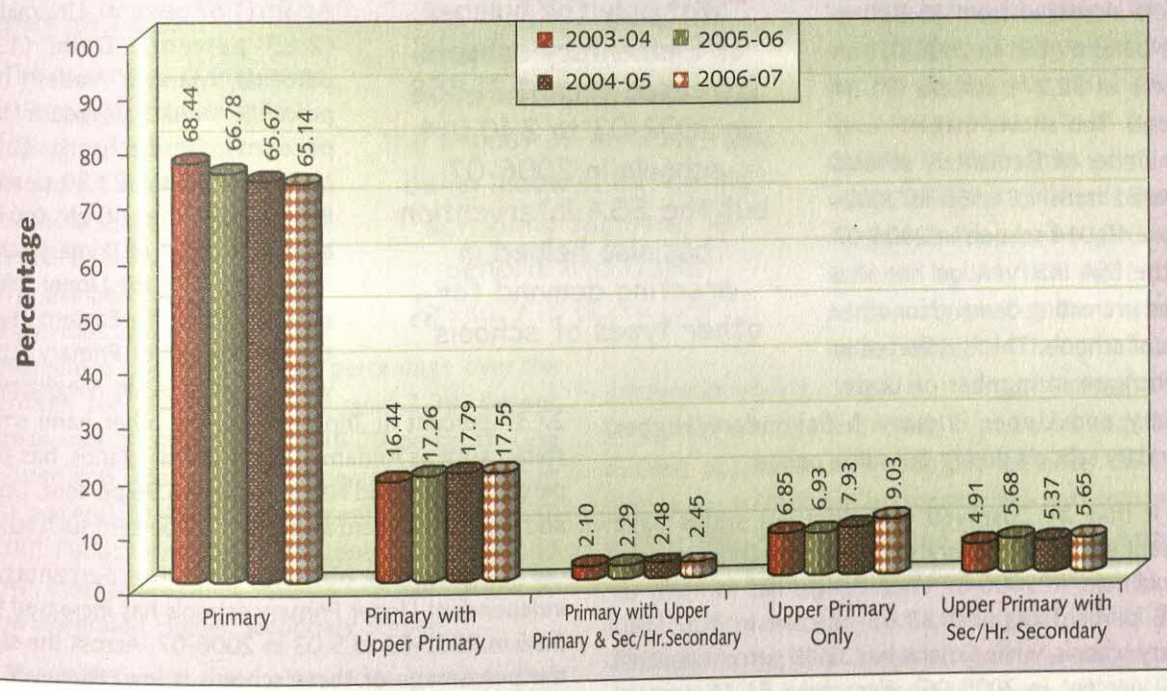
Year	Number of Districts	School Category					No Response	Total Schools	Schools Located in Rural Areas
		Primary Only	Primary with Upper Primary	Primary with Upper Primary & Secondary /Hr. Secondary	Upper Primary Only	Upper Primary & Secondary /Hr. Secondary			
Number of Schools									
2002-03	461	601866	131558	18598	50878	35330	15371	853601	742633
2003-04	539	637469	153096	19531	63779	45716	11880	931471	811520
2004-05	581	693030	179094	23723	71880	58970	11116	1037813	901824
2005-06	604	738150	199946	27907	89164	60306	8560	1124033	980526
2006-07	**609**	**779482**	**210014**	**29312**	**108095**	**67601**	**2159**	**1196663**	**1042929**
Percentage									
2002-03	461	70.51	15.41	2.18	5.96	4.14	1.80	100.00	87.00
2003-04	539	68.44	16.44	2.10	6.85	4.91	1.28	100.00	87.12
2004-05	581	66.78	17.26	2.29	6.93	5.68	1.07	100.00	86.90
2005-06	604	65.67	17.79	2.48	7.93	5.37	0.76	100.00	87.23
2006-07	**609**	**65.14**	**17.55**	**2.45**	**9.03**	**5.65**	**0.18**	**100.00**	**87.15**

Obviously because of its size, Uttar Pradesh with the highest number of districts (70), has the highest number of schools (1,68,969) as in 2006-07, which is 14.12 percent of the total number of schools across 35

States and UTs. Uttar Pradesh is followed by Madhya Pradesh (1,25,858), Rajasthan (1,00,965), Andhra Pradesh (1,00,932), West Bengal (67,265), Assam (63,996), Karnataka (55,364), Bihar (54,884), Tamil Nadu (52,423), Orissa (51,198), Chhattisgarh (48,968) etc. On the other hand, because of its size, Lakshadweep has the lowest number of schools (30). There are 86 schools in Daman and Diu, 178 in Chandigarh and 350 in Andaman and Nicobar Islands. The other states with comparatively less number of schools are Kerala (12,183), Haryana (16,180), Himachal Pradesh (16,614), Uttarakhand (19,161) etc. Six of the north-eastern states, namely Arunachal Pradesh (3,412), Meghalaya (9,268), Mizoram (2,782), Nagaland (2,537), Sikkim (1,226), and Tripura (3,679), too have smaller number of schools imparting elementary education, compared to other states; this is because of their small size and less population. On the other hand, Goa has 1,420 schools as in 2006-07. The capital city of Delhi too reported only 4,742 schools that impart elementary education in its 9 districts.

> "Percentage of Upper Primary schools has significantly improved over a period of time which may be because of the SSA intervention that would have created demand for Upper Primary schools/sections"

Figure 2.1
Percentage Distribution of Schools by Category : 2003-04 to 2006-07



The number of schools distributed by category further reveals that majority of the schools (65.14 percent) are independent Primary schools. The percentage of such Primary schools has, however, shown a declining trend over the previous years. It was 65.67 percent in 2005-06 and 66.78 percent in 2004-05. Only two out of every ten schools imparting elementary education across 609 districts that reported data in 2006-07, are independent elementary schools. The percentages of other category schools are: Upper Primary only – 9.03 percent (against 7.93 percent in 2005-06); Upper Primary integrated with Secondary and Higher Secondary – 5.65 percent (against 5.37 percent in 2005-06); and Primary integrated with Upper Primary, Secondary and Higher Secondary – 2.45 percent (against 2.48 percent in 2005-06).

It is further observed that the percentage of Upper Primary schools has significantly improved over a period of time from 2002-03 (5.96 percent) to 2006-07 (9.03

[illegible]
Date 28/12/2010
Acc. No. 14372

percent) which may be because of the SSA intervention that would have created demand for Upper Primary schools/sections. During 2005-06 and 2006-07, the same has increased from 7.93 to 9.03 percent. In absolute terms, the number of Upper Primary schools covered under DISE increased from 50,878 in 2002-03 to 71,880 in 2004-05 and to 89,164 schools in 2005-06. During the current year, information from as many as 1,08,095 Upper Primary schools has been received under DISE operations. This shows an impressive increase of 57,217 schools which is more than 100 percent of total Upper Primary schools in 2002-03 (Table B1). During 2005-06 and 2006-07, the number of Upper Primary schools increased by 18,931 which is 21.23 percent of the total number of Upper Primary schools in 2005-06. During the same period, the number of Upper Primary & Secondary/Higher Secondary schools increased from 35,330 in 2002-03 to 67,601 in 2006-07; an increase of 32,271 schools (91.34 percent). This shows that not only the number of Elementary schools increased from 1,31,558 in 2002-03 to 2,10,014 schools in 2006-07 but the SSA intervention has also helped in creating demand for other types of schools. This is reflected in the increase in number of Upper Primary and Upper Primary & Secondary/Higher Secondary schools during the same period.

> "Not only the number of Elementary schools increased from 1,31,558 in 2002-03 to 2,10,014 schools in 2006-07 but the SSA intervention has also helped in creating demand for other types of schools"

It may be observed that different states have different shares of Primary schools in the total schools. For example, in 2006-07 West Bengal has as many as 82.66 percent (against 83.62 percent in 2005-06) Primary schools, while Gujarat has 32.19 percent (against 34.20 percent in 2005-06), Karnataka 51.11 percent (against 49.90 percent in 2005-06), Uttar Pradesh 72.76 percent (against 73.37 percent in 2005-06), Bihar 67.39 percent (against 69.75 percent in 2005-06), Jharkhand 73.91 percent (against 73.30 percent in 2005-06), Mizoram 56.33 percent (against 55.30 percent in 2005-06), and Kerala 54.41 percent (against 54.86 percent in 2005-06). The percentage of Primary schools in Delhi in 2006-07 is little over 50 percent, compared to 78.08 percent in Arunachal Pradesh. Chandigarh, on the other hand, has only 16.85 percent (against 15.68 percent in 2005-06) independent Primary schools as majority of its Primary schools are integrated with Upper Primary & Secondary/Higher Secondary schools (62.92 percent). In Manipur, of the total 3,869 schools, 64.87 percent are independent Primary schools compared to 43.26 percent in Puducherry.

The distribution of schools further reveals that the percentage of Primary schools integrated with Upper Primary schools is only 17.55 (17.79 percent in 2005-06) and the rest of the types of schools have a very low percentage to the total schools. However, in states like Gujarat (64.49 percent), Karnataka (45.31 percent), Jammu and Kashmir (31.42 percent), Maharashtra (30.43 percent), and Tripura (27.37 percent), the percentage of Primary schools integrated with the Upper Primary schools is quite high compared to the same in other states. The percentage is as low as 1.07 percent in West Bengal, followed by 2.31 percent in Himachal Pradesh and 3.68 percent in Uttar Pradesh. Assam (1.87 percent), Uttarakhand (2.89 percent), Delhi (13.96 percent), Madhya Pradesh (9.74 percent), Arunachal Pradesh (18.12 percent), Puducherry (22.31 percent), Orissa (23.30 percent), Bihar (25.88 percent) etc. too have a small number of Primary schools integrated with the Upper Primary schools. In North-Eastern region, the percentage of Primary schools varies from 4.92 in Meghalaya to 27.37 percent in Tripura. On the other hand smaller states, such as Andaman and Nicobar Islands, has 18.57 percent, Dadra and Nagar Haveli 36.96 percent, Daman and Diu 8.14 percent and Goa 7.39 percent such schools.

It is further observed that the percentage of independent Upper Primary schools has increased from 5.96 in 2002-03 to 9.03 in 2006-07. Across the states the percentage of these schools is low. However, in a few states like Mizoram (30.01 percent), Assam (14.96 percent), Chhattisgarh (21.28 percent), Meghalaya (14.04 percent), Himachal Pradesh (13.13 percent), Madhya Pradesh (17.90 percent), Uttar Pradesh (22.10 percent) and Uttarakhand (16.64 percent), the percentage of such schools is comparatively higher than the national average (9.03 percent). The percentage of independent Upper Primary schools in Delhi is only 1.98 while Andaman and Nicobar Islands, Arunachal Pradesh, Jammu & Kashmir, and Puducherry have negligible number of such schools. In states such as Bihar, Gujarat, Jharkhand, Karnataka, Maharashtra, and Rajasthan, the percentage of independent Upper Primary schools to total number of schools is very low. Andhra Pradesh, Dadra & Nagar Haveli and Tripura did not report any independent Upper Primary school operating in 2006-07, which is also the case for 2005-06.

The percentage of Upper Primary schools attached to Secondary and Higher Secondary schools is low at 5.65; it was 5.37 in the previous year. States, such as Andhra Pradesh (15.91 percent), Delhi (10.61 percent), Haryana (12.33 percent), Himachal Pradesh (10.59 percent), Kerala (12.09 percent), Maharashtra (19.04 percent), Puducherry (13.62 percent), Punjab (13.79 percent) and West Bengal (11.01 percent) are a few states that have a good number of such schools. Rest of the states has only a few Upper Primary schools attached to Secondary and Higher Secondary schools.

The percentage of integrated Higher Secondary schools in 2006-07 imparting education from Classes I to XII is only 2.45 of the total schools/sections that impart elementary education in the country; this percentage was 2.48 in the previous year. No significant improvement is observed in their percentage over the percentage for 2004-05, which was 2.29. Except Andaman and Nicobar Islands (18.29 percent), Goa (12.27 percent), Manipur (12.87 percent), Chandigarh (32.92 percent), Delhi (22.90 percent), Tripura (16.36 percent), Puducherry (19.76 percent), Sikkim (12.32 percent), most of the other States & UTs have below 10 percent integrated Higher Secondary schools.

> "Despite increase in the number of Primary schools by 41,332 during the intervening period, the improved ratio reflects the impact of interventions being made in extending schooling facilities in general and Upper Primary in particular"

The analysis presented above clearly shows that the total number of schools imparting elementary education covered under DISE has increased impressively over a period of time. Despite significant increase, a few schools, however, still remain uncovered. Efforts are being made to cover all uncovered recognised schools that impart elementary education, during 2007-08. States & UTs are advised to prepare a fresh list of all recognized schools that impart elementary education in their state to identify all the uncovered schools. They are also advised to prepare a master list of such schools by school type and management which needs to be updated regularly. Therefore, the total number of schools that impart elementary education may be a bit higher than the number of schools covered under DISE in 2006-07.

Ratio of Primary to Upper Primary Schools/Sections

The Programme of Action (1992) envisaged an Upper Primary school/section for every set of two Primary schools/sections. The ratio calculated for 2006-07 comes to one Upper Primary school/section for every set of 2.45 Primary schools/sections at the national level; this ratio in 2005-06, was 2.57 and in 2004-05, 2.68 (Table B2). The same was as high as 3.18 in 2002-03. Lower ratio means more availability of Upper Primary schools/sections for the existing Primary schools/sections. For the present year, i.e. 2006-07, the average pertains to all the 609 districts/35 states from which data under DISE was obtained. Despite increase in the number of Primary schools by 41,332 during the intervening period, the improved ratio reflects the impact of interventions being made in extending schooling facilities in general and Upper Primary in particular (significant number of schools have been opened since 1994, the year in which DPEP was launched which got momentum in 2001 when SSA was launched. Majority of new schools opened also have school building, see Table B3(A) and B3(B)). However, the ratio is still high at 2.67 (2.79 in 2005-06) in the rural areas compared to only 1.54 in the urban areas (1.57 in 2005-06). Irrespective of area, a declining trend is noticed in ratio during the period 2004-05 to 2006-07. In rural areas, it declined from 2.93 in 2004-05 to 2.79 in 2005-06 and to 2.67 in 2006-07. Similarly, in urban areas the ratio declined from 1.64 in 2004-05 to 1.57 in 2005-06 and further to 1.54 in 2006-07. All areas together have also shown decline in ratio during the period 2002-03 to 2006-07. From a high of 3.18 in 2002-03, it declined to 2.87 in 2003-04 and further to 2.68 in 2004-05, 2.56 in 2005-06 and to 2.45 in 2006-07.

Table B2
Ratio of Primary to Upper Primary Schools/Sections 2002-03 to 2006-07

Year	Average Based on	Ratio
2002-03	461 districts/18 states	3.18
2003-04	539 districts/25 states	2.87
2004-05	581 districts/29 states	2.68
2005-06	604 districts/35 states	2.57
2006-07	609 districts/35 states	2.45

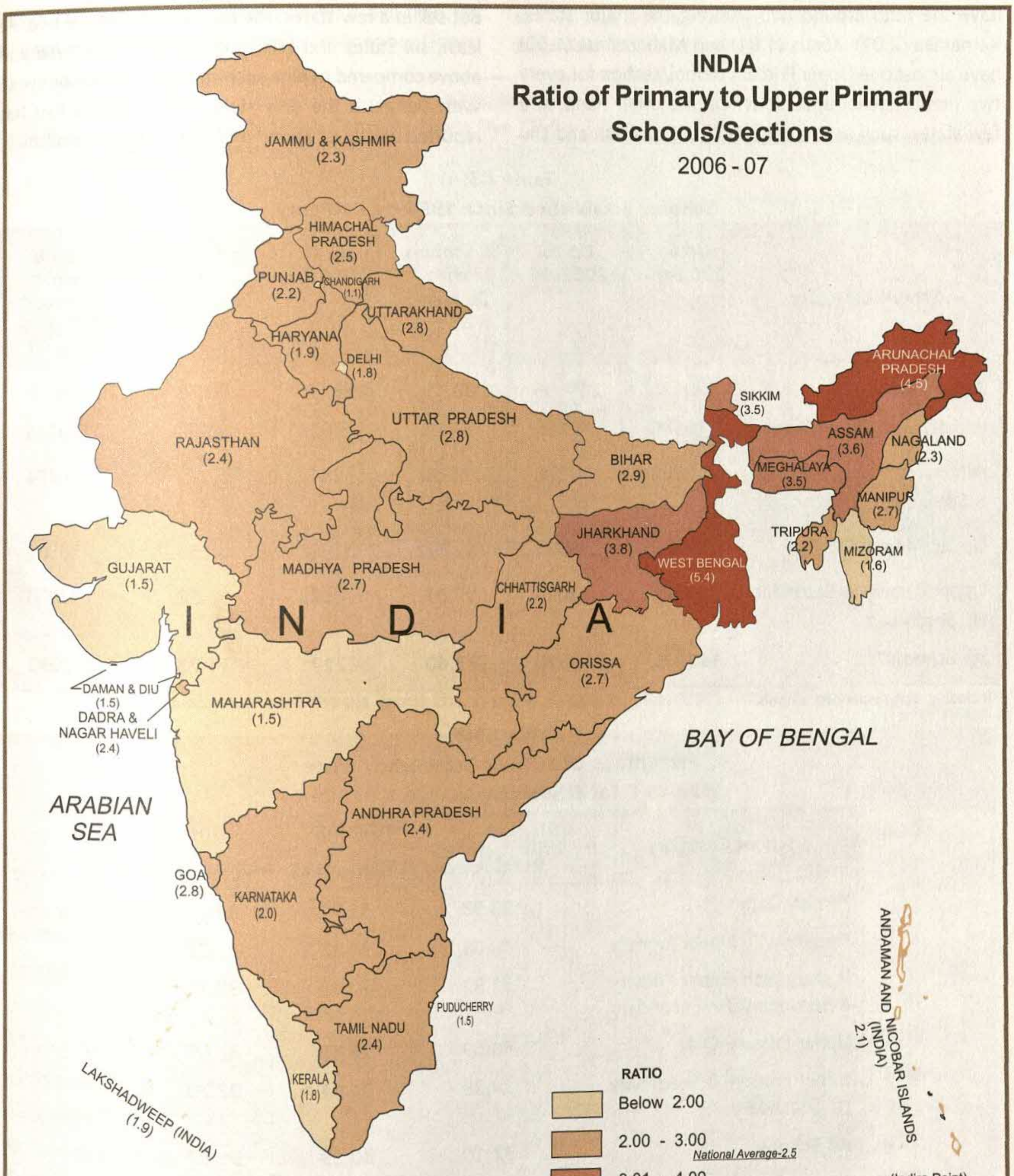
The improved ratio of Primary to Upper Primary schools/sections clearly shows availability of more Upper Primary schooling facilities across the country which is an encouraging signal. Despite significant improvement, there are still a few locations where the ratio of Primary to Upper Primary schools/sections is not as envisaged. It is hoped that during the remaining period of SSA, attention would be paid to un-served locations all which need careful analysis of available data which is very rich in nature and is available at all disaggregated levels. A number of activities have already been initiated under SSA in this direction and it is hoped that more Upper Primary schooling facilities would be available in the years to come.

Table B3
Ratio of Primary to Upper Primary Schools/Sections by Management : 2004-05 to 2006-07

Management	Rural Areas			Urban Areas			All Areas			
	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Department of Education	3.49	3.23	3.07	2.31	2.31	2.35	3.53	3.37	3.14	3.00
Tribal/Social Welfare Department	3.38	3.04	2.61	2.14	1.92	1.65	3.19	3.29	2.96	2.55
Local Body	3.11	3.24	3.34	2.10	2.08	1.99	3.32	2.99	3.11	3.19
All Government Managements	3.38	3.22	3.11	2.24	2.23	2.22	3.46	3.26	3.13	3.02
Private Aided	0.93	0.87	0.78	1.00	0.92	0.88	0.98	0.95	0.89	0.81
Private Unaided	1.54	1.60	1.63	1.36	1.31	1.30	1.54	1.46	1.47	1.49
All Private Managements	1.27	1.31	1.30	1.25	1.19	1.18	1.27	1.26	1.26	1.25
All Schools	**2.93**	**2.79**	**2.67**	**1.64**	**1.57**	**1.54**	**2.87**	**2.68**	**2.57**	**2.45**

Further, a significant difference in ratio of Primary to Upper Primary schools/sections is noticed in schools run by the Government and Private managements which is also true for both rural and urban areas. The ratio in Government run schools works out to be 3.02 (3.13 in 2005-06) compared to 1.25 in Private managed schools (Table B3). However, no significant difference is noticed in the ratio in Private managed schools in rural (1.30) and urban (1.18) areas. All the three types of Government managements, namely Department of Education, Tribal and Social Welfare Department, and Local Body, have higher ratio in rural areas than in the urban areas and the difference between the two is wide and significant. A similar trend was also observed during the previous year, i.e. 2005-06. Further, in urban areas it has been observed that the ratio in case of both the Local Body, and Social and Tribal Welfare Department is just below two but the same is not true in case of ratio in rural areas. Both in rural (3.07) and urban (2.35) areas the ratio of Primary to Upper Primary schools/sections is well above two in case of schools run by the Department of Education.

It is noticed that in about 21 states, the ratio of Primary to Upper Primary schools/sections is better than the national average of 2.45. Many of these states



Note: Map not to scale

Map 2.1

have the ratio around two. Among the major states, Karnataka (2.02), Kerala (1.81) and Maharashtra (1.50) have almost one Upper Primary school/section for every two Primary schools/sections. On the other hand, in a few states, such as Chandigarh (1.09), Daman and Diu (1.46), Delhi (1.77), Gujarat (1.45), Mizoram (1.59) and Puducherry (1.53), the ratio of Primary to Upper Primary schools/sections is below two.

It is observed that barring a few states, others have shown improvement in the ratio over the previous year. But still in a few states, the ratio is much above two. At least, six States and UTs reported a ratio of three and above compared to nine such states in the previous year. West Bengal is the only state in the country that has reported a ratio of above 5 (5.41); meaning availability of one Upper Primary school/section for every fiv Primary schools/sections it has. It is hoped that recen initiative undertaken by the state would help i improving the ratio in the coming year. The ratio i Arunachal Pradesh (4.52), Assam (3.61), Bihar (2.94 Jharkhand (3.75), Meghalaya (3.47), Orissa (2.70

Table B3(A)

Schools Established Since 1994 by Category

School Category	Up to 2002-03	Up to 2005-06	% Schools with Building	Up to 2006-07	% Schools with Building	Schools Opened during 2002-03 & 2006-07
Primary Only	120176	214106	80.31	258780	90.71	138604
Primary with Upper Primary	16546	37565	97.04	45921	98.23	29375
Primary with Upper Primary & Secondary/Hr. Secondary	3368	7696	98.08	8842	97.92	5474
Upper Primary Only	15623	39908	80.37	51988	88.56	36365
Upper Primary & Secondary/ Hr. Secondary	3943	12074	93.85	16023	96.22	12080
All Schools*	**161279**	**313570**	**83.40**	**382271**	**91.73**	**220992**

*Including non-responded schools.

Table B3(B)

Percentage of Schools Established Since 1994 to Total Schools by Category : 2006-07

School Category	Percentage		
	Rural Areas	Urban Areas	All Areas
Primary Only	33.33	31.94	33.20
Primary with Upper Primary	18.68	34.91	21.87
Primary with Upper Primary & Secondary/Hr. Secondary	31.92	27.55	30.17
Upper Primary Only	50.59	26.59	48.09
Upper Primary & Secondary/ Hr. Secondary	24.38	21.64	23.70
All Schoos	**32.10**	**30.89**	**31.94**

Sikkim (3.54) and Uttar Pradesh (2.79) is still high, as average number of Primary schools/sections per Upper Primary school/section in these states is well above two. All these states need careful analysis of block and district-specific data available so that additional Upper Primary schools/sections can be provided or even a few existing Primary schools can also be upgraded to Upper Primary schools. While doing so they are also advised to analyse

Figure 2.2
Location of Schools from the CRC : 2003-04 to 2006-07

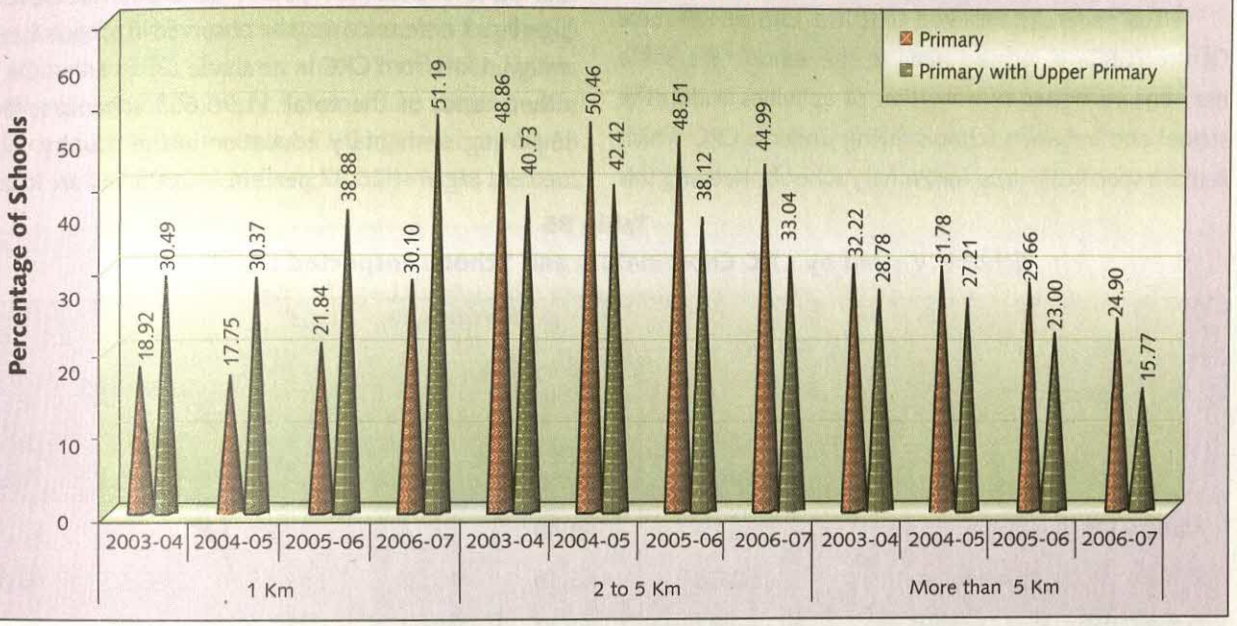


Table B4
Location of Schools from the Cluster Resource Centre : 2006-07

(Percentage)

School Category	Distance		
	Less than 1 km	2 to 5 km	Beyond 5 km
Primary Only	30.10	44.99	24.90
Primary with Upper Primary	51.19	33.04	15.77
Primary with Upper Primary & Secondary/Hr. Secondary	53.60	35.23	11.17
Upper Primary Only	28.33	47.30	24.37
Upper Primary & Secondary/ Hr. Secondary	48.15	33.85	17.90
All Schools (All Areas)	**35.36**	**42.16**	**22.48**
All Schools (Rural Areas)	32.53	42.59	24.88
All Schools (Urban Areas)	54.02	39.71	6.27
All Schools (2005-06)	27.74	45.39	26.87
All Schools (2004-05)	23.94	46.97	29.10
All Schools (2003-04)	24.75	45.52	29.73
All Schools (2002-03)	32.64	36.93	30.41

Note: Total may not add to hundred because of no responses and rounding of figures.

population size of habitation and distance from the nearby school.

Location of Schools

It is generally believed that if a Cluster Resource Centre (CRC) is located near to the school, the same may ensure better coordination of activities within the school and between schools falling under a CRC which is more specifically true for Primary schools. Keeping this in view, a school is identified as the Cluster Resource Centre and in most of the cases, the Head Master of such a school is designated as the CRC Coordinator. To examine this aspect, the location of schools from the CRC is analysed and is presented by school category (Table B4). Schools are distributed in distance slabs of up to 1 km, 2 to 5 km and beyond 5 km, based on the DISE data.

Table B5

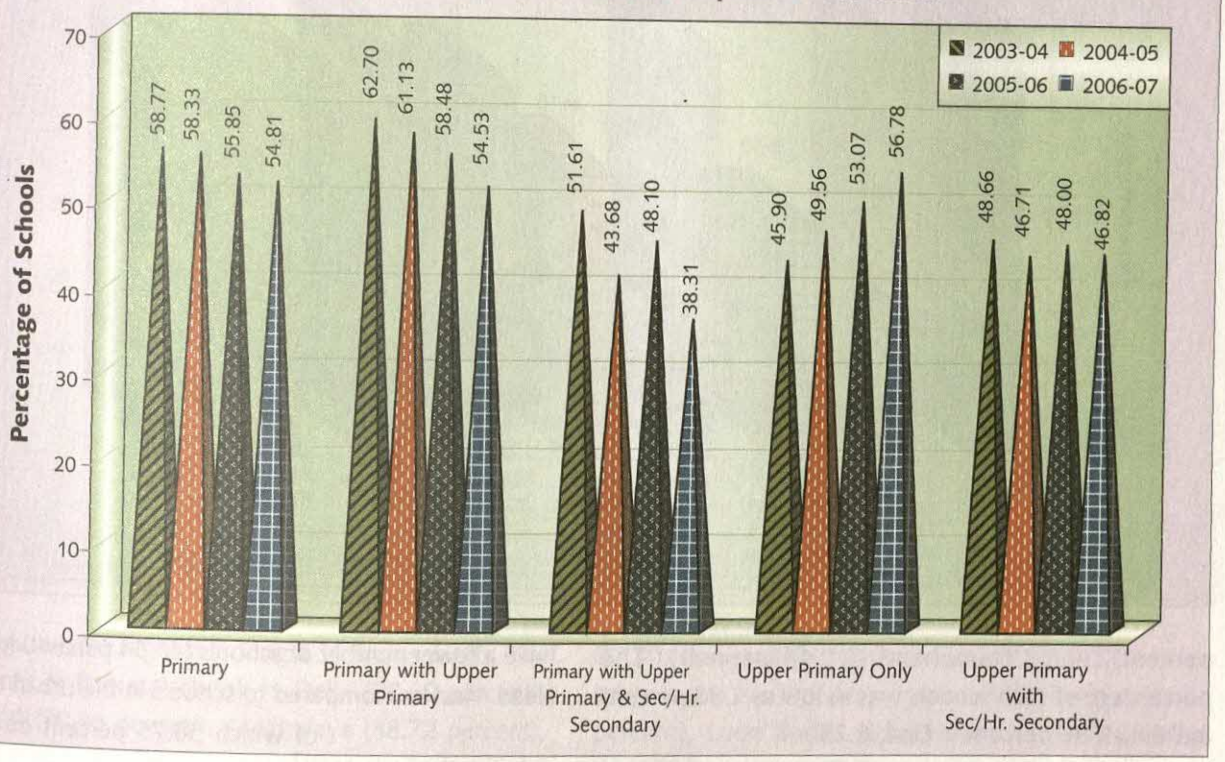
Schools Visited by CRC Coordinators and Schools Inspected : 2005-06

School Category	Percentage Schools					
	Visited by CRC Coordinator			Inspected		
	All Areas	Rural Areas	Urban Areas	All Areas	Rural Areas	Urban Areas
Primary Only	66.69	68.40	49.74	54.81	54.99	53.16
Primary with Upper Primary	62.38	66.15	46.95	54.53	56.50	46.50
Primary with Upper Primary & Secondary/ Hr. Secondary	35.92	41.11	28.04	38.31	40.83	34.52
Upper Primary Only	63.14	65.77	40.43	56.78	57.11	53.96
Upper Primary & Secondary/ Hr. Secondary	44.10	46.15	37.77	46.82	45.52	50.93
All Schools (2005-06)	**63.46**	**66.22**	**45.30**	**53.99**	**54.71**	**49.70**
All Schools (2004-05)	62.33	65.30	43.49	55.29	55.97	52.53
All Schools (2003-04)	63.01	66.39	43.25	56.71	57.87	52.47
All Schools (2002-03)	57.84	60.77	40.85	57.26	58.10	55.88
All Schools (2001-02)	53.31	56.30	36.45	58.44	59.60	57.43

The average of all states reveals that only 30.10 percent (against 21.84 percent in 2005-06) Primary schools are located within one km from the CRC, and that 44.99 percent (against 48.51 percent in 2005-06) schools are located 2 to 5 km from CRC (Table B4). About 66 percent Primary schools are located even beyond 5 km from the Block HQ. Comparatively, more schools in 2006-07 are located within 1 km from the CRC than during the previous year (Table B4). However, a significant difference may be observed in schools located within 1 km from CRC in rural and urban areas. On the other hand, of the total 11,96,663 schools/sections imparting elementary education in the country, 22.48 percent (against 26.87 percent in 2005-06) are located even more than 5 km from the CRC. Much difference is noticed in the percentage of such schools located in the rural (24.88 percent) and urban (6.27 percent) areas. Further, it may be observed that every second independent elementary school is located within 1 km from the CRC which is also true for integrated Higher Secondary schools. More than 48 percent of the Upper Primary attached to Secondary and Higher Secondary schools are located within 1 km from the CRC.

The state-specific study of locations of Primary schools from the CRC shows that 76.35 percent schools in Delhi, 96.47 percent in Karnataka and 79.50 percent in Nagaland are located within 1 km from the CRC. Rajasthan reported that almost every school in the state is located within 1 km from the CRC. On the other hand, more than half of the Primary schools in Andaman and Nicobar Islands (50.26 percent) and West Bengal (57.95 percent) are located beyond 5 km from the CRC. Even in the UT of Chandigarh, 76.67 percent of Primary schools are located at a distance of 2 to 5 km from the CRC against only 10.68 percent in Delhi. In West Bengal, only 14.36 percent Primary schools are located within 1 km from CRC against 27.69 percent between 2 to 5 and remaining 57.95 percent beyond 5 km, which is as good as in Bihar.

Figure 2.3
Percentage Distribution of Schools Inspected : All States

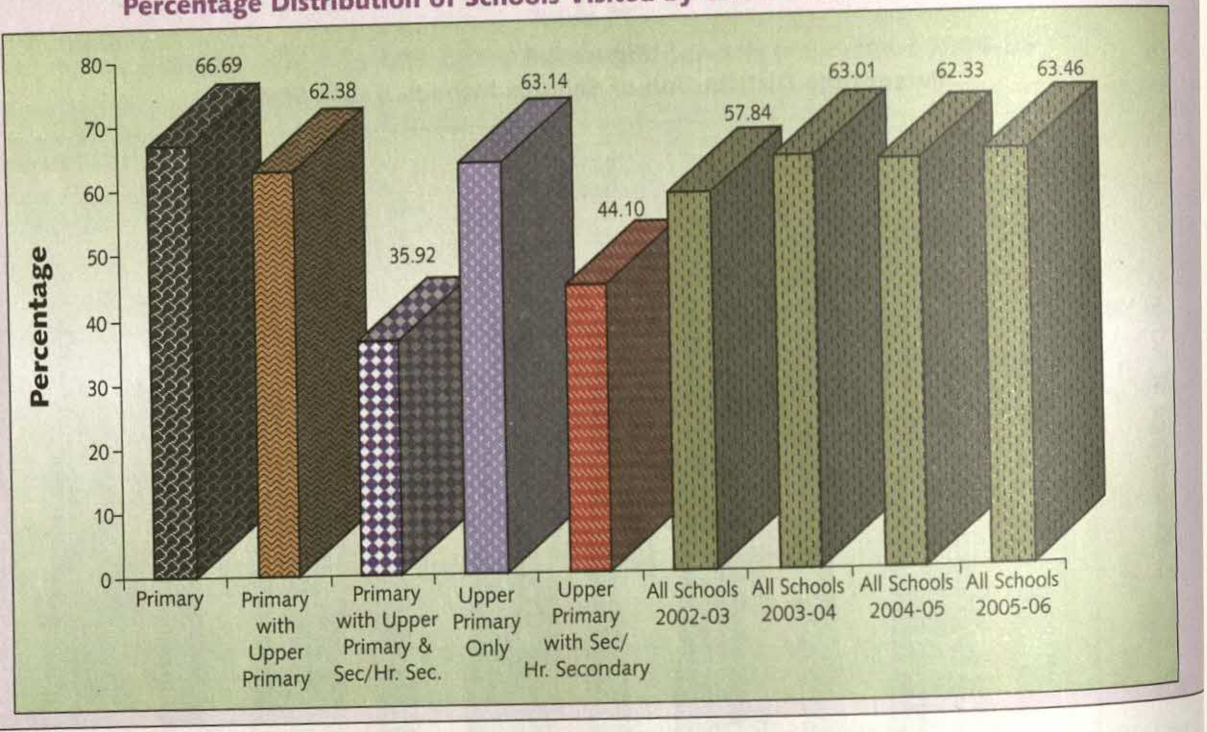


It is felt that if the office of the Block Education Officer/Block Resource Centre (BRC) Coordinator is located near the schools, it helps in providing better guidance to school Head Master/Head Teacher. To examine it, the location of schools from the Block HQ is analysed by school category. The data reveals that 66 percent Primary schools are located beyond 5 km from the Block HQ.

Besides visit by the CRC Coordinators, the school inspectors are also supposed to visit schools. Table B5 shows the schools visited by the CRC Coordinator and inspected by the officers during the previous academic year. Nearly 63.46 percent of the total schools (all categories) were visited by the CRC Coordinators during the previous academic year, i.e. 2005-06, against 62.33 percent schools in yet earlier year 2004-05. However, the percentage of schools inspected (53.99 percent) was a bit lower than the schools visited by the CRC Coordinators (63.46 percent). It is also observed that the number of schools visited and inspected was much higher in rural areas than the same in the urban areas, which is true for all school types. Further, it has been observed that the percentage of integrated Higher Secondary schools visited and inspected was much lower in case of other types of schools. The Primary schools visited were about 66.69 percent (against 66 percent in 2004-05), and those inspected were 54.81 percent (against 56 percent in 2004-05).

The states in which CRC Coordinators visited more than 75 percent Primary schools are: Andhra Pradesh (88.08 percent), Assam (75.70 percent), Bihar (75.21 percent), Chhattisgarh (81.96 percent), Gujarat (80.63 percent), Jammu & Kashmir (87.91 percent), Jharkhand (80.36 percent), Karnataka (86.91 percent), Maharashtra (85.03 percent), Manipur (95.26 percent), Orissa (95.93 percent), and Uttarakhand (81.47 percent). The percentage of such schools was as low as 1.38 percent in Delhi, 9.36 percent in Goa, 6.25 percent in Lakshadweep, 1.38 percent in Rajasthan and 14.67 percent in Tamil Nadu. Further, it may be observed that only 4 out of 10 schools (all categories) in urban areas were visited by the CRC Coordinator compared to 6 out of 10 in schools located in the rural areas. On the other hand, 6 out of 10 schools in rural areas and 5 out of 10 schools in urban areas were inspected during the previous academic year, that is, 2005-06 which is quite similar to the pattern in 2004-05.

Figure 2.4
Percentage Distribution of Schools Visited by CRC Coordinator : 2005-06



Head Master in Schools

On the one hand, a few schools were not visited by CRC Coordinators or inspected. On the other hand, a good number of schools are yet to be provided with regular Head Master. DISE 2006-07 data reveals that a little more than half of the total (all categories) schools are yet to be provided regular Head Masters. Rural areas have a fewer number of schools (46.54 percent) having Head Masters, compared to schools in the urban areas of which 56.75 percent do have the Head Masters.

> "DISE 2006-07 data reveals that a little more than half of the total schools are yet to be provided regular Head Masters"

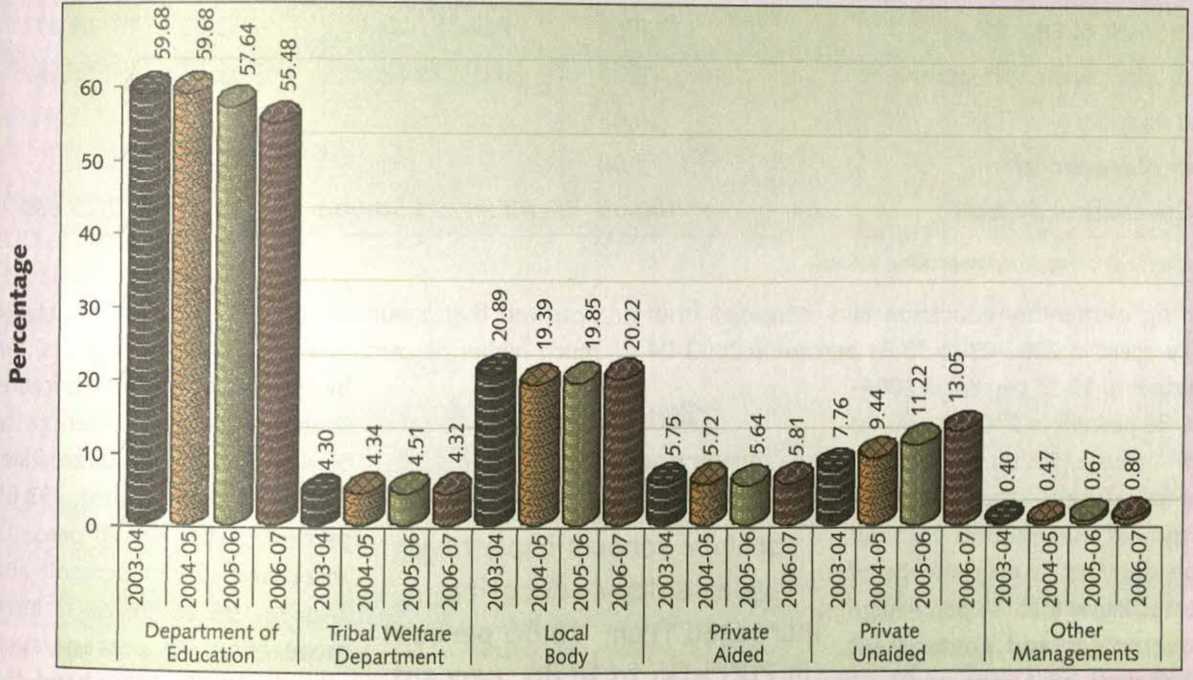
The percentage of Head Masters in the private managed schools (63.36) is much higher than the same in the government managed schools (44.26). The highest percentage of schools with Head Masters is in independent Elementary schools (58.88). The percentage of such schools in urban areas is high at 64.1 compared to 57.62 in rural areas. The lowest 41.1 percent schools with Head Master is observed in case

Upper Primary attached to Secondary and Higher Secondary schools. Further, it is noticed that 44.51 percent Primary schools had Head Masters in position in 2006-07. The remaining schools might have Head Teachers in-charge of the schools.

Further, it has been observed that about 94 percent Primary schools in Kerala had a Head Master; the figure is the highest amongst 35 States & UTs. The majority of Primary schools in Delhi (88.69 percent), Gujarat (90.35 percent), Meghalaya (88.72 percent), Tamil Nadu (89.70 percent), Uttar Pradesh (79.11 percent), West Bengal (70.55 percent) and Sikkim (77.84 percent), had Head Masters. In rest of the states, percentage of Primary schools with Head Masters is much lower than in the states presented above. For effective functioning of schools, it is essential that all the schools are provided with a regular Head Master, both in the small and big schools.

Figure 2.5

Percentage Distribution of Schools (All) by Management : All States



School Management

The number of schools run by the government managements covered under DISE increased over a period of time, though in percentage terms, they have shown a declining trend during the period 2002-03 to 2006-07. Correspondingly, the share of private managed schools (aided and unaided), during the same period, increased significantly. About 81 percent (9,67,250 schools) of the total schools in 2006-07 are government run schools; this percentage was 83.14 (9,29,345 schools) during the previous year. In 2002-03, the percentage of schools run by government managements was as high as 87.30. Government run schools in 2006-07 include schools run by the Department of Education (68.64 percent), Local Bodies (25.02 percent) and the Tribal Welfare Department (5.34 percent). It also includes 1.00 percent other management schools which do not come under the above three management categories. About 0.32 percent schools did not report management type. The balance of 2,25,635 schools (18.86 percent, all category schools) in 2006-07 have private managements. There were 1,89,521 (16.86 percent) such schools during the previous year, and 1,57,268 schools (15.15 percent) in 2004-05. Within the private managed schools, 30.79 percent (69,473 schools) are private aided schools and the remaining 69.21 percent (1,56,162 schools) are private unaided schools. The corresponding figures in 2005-06 were 33.46 percent (63,411 schools) private aided and 66.54 percent (1,26,110 schools) private unaided schools. This shows that with improved coverage under DISE, the percent share of private schools imparting elementary education also increased from 11.70 percent in 2002-03 to 13.51 percent in 2003-04 and further to 15.15 percent in 2004-05, 16.86 percent in 2005-06 and to 18.86 percent in 2006-07. Correspondingly, the share of government run schools to total schools declined. It may also be of interest to know that the percentage of government and government aided schools is as high as 86.63 which shows that nine out of every ten schools imparting elementary education in the country are funded by the government.

Table B6

Distribution of Schools by Management : 2006-07

Management Category	All Government Managements		All Private Managements		Total Schools
	Number	9,67,250	Number	2,25,635	11,96,663*
	%	81.14*	%	18.86	100.00
Department of Education		68.64	Private Aided	30.79	69,473
Tribal/Social Welfare Department		5.34	Private Unaided	69.21	1,56,162
Local Body		25.02			
Other Managements		1.00			
All Government Schools		**100.00**	**All Private Schools**	**100.00**	**2,25,635**

* Including 0.32 percent non responding schools.

> "With improved coverage under DISE, the percent share of private schools imparting elementary education increased from 16.86 percent in 2005-06 to 18.86 percent in 2006-07. Correspondingly, the share of government run schools to total schools declined"

Department of Education Management

It may be observed that about 81 percent of the total schools are being run by the government managements, amongst which 68.64 percent alone are being run by the Department of Education. Further, it is observed that between government managements, the share of the Department of Education has declined from 59.68 percent in 2003-04 to 55.48 percent in 2006-07. During the previous year, i.e. 2005-06, the percentage of such schools was 57.64. About 58.85 and 33.03 percent (all category) schools respectively in rural and urban areas are being run by the Department of Education. Their respective percentages during the previous year were 61.09 and 35.10. It is further observed that a number of states in 2006-07 have a much higher percentage of schools (all categories) run by the Department of Education than the national average of 55.48 percent. For instance, states like Arunachal Pradesh (93.05 percent), Bihar (97.70 percent), Jharkhand (94.91 percent) and Tripura (96.30 percent) have more than 90 percent such schools. On the other hand, the percentage of such schools in Andhra Pradesh is only 2.85, in Maharashtra 0.64, in Delhi 19.89, in Gujarat 8.36, in Kerala 36.90 and in Tamil Nadu 8.36.

The category-wise distribution of schools (all categories) run by the Department of Education shows that on an average 60.82 percent (against 63.44 percent in 2005-06) of the total Primary schools in the country are being run by the Department of Education itself. More than 88 percent of the total Primary schools are being run by the government managements. A cursory look, however, reveals that in many states, percentage of such schools is above 95. In Arunachal Pradesh, Bihar, Jharkhand and Tripura, over 95 percent of the total Primary schools are being run by the Department of

Education. Assam (89.41 percent), Goa (91.87 percent), Haryana (94.00 percent), Himachal Pradesh (92.11 percent), Karnataka (86.71 percent), Orissa (92.30 percent) and West Bengal (98.48 percent) too have majority of Primary schools being run by the Department of Education. But in states like Andhra Pradesh (2.47 percent), Delhi (1.46 percent), Maharashtra (0.76 percent) and Tamil Nadu (1.64 percent), the percentage of Primary schools run by the Department of Education is much lower than the national average of 60.82 percent.

Table B7

Percentage of Schools by Management and Category : 2006-07

School Category	School Management					
	Department of Education	Tribal/Social Welfare Department	Local Body	Private Aided	Private Unaided	Other Managements
Primary Only	60.82	4.59	21.79	2.95	8.70	0.81
Primary with Upper Primary	41.66	1.79	28.11	5.20	22.51	0.67
Primary with Upper Primary & Secondary/ Hr. Secondary	27.21	3.59	3.25	12.00	50.98	2.85
Upper Primary Only	66.51	8.39	1.04	10.55	13.06	0.44
Upper Primary & Secondary/ Hr. Secondary	33.15	3.00	16.29	30.38	16.37	0.76
All Schools	**55.48**	**4.32**	**20.22**	**5.81**	**13.05**	**0.80**
All Schools (Rural Areas)	58.85	4.73	21.51	4.71	9.27	0.72
All Schools (Urban Areas)	33.03	1.56	11.65	13.36	38.59	1.40
All Schools (2005-06)	57.64	4.51	19.85	5.64	11.22	0.67
All Schools (2004-05)	59.68	4.34	19.39	5.72	9.44	0.47
All Schools (2003-04)	59.68	4.30	20.89	5.75	7.76	0.40
All Schools (2002-03)	61.06	4.38	20.61	4.96	6.74	0.39

Note: Totals may not add to hundred because of no-responses and rounding of figures.

More than 76 percent of the total Upper Primary schools are being run by the Government managements amongst which the majority of such schools are being run by the Department of Education. The percent share of such schools run by the Department of Education alone in 2006-07 is 66.51 against 68.46 percent in 2005-06. In Arunachal Pradesh, Jammu & Kashmir, and Lakshadweep, all Upper Primary schools are being run under the management of Department of Education. In the states of Bihar (94.34 percent), Haryana (92.06 percent), Himachal Pradesh (99.36 percent), Nagaland (98.39 percent), Punjab (96.84 percent), Rajasthan (84.54 percent), Uttar Pradesh (73.38 percent) and Uttarakhand (82.63 percent), majority of the independent Upper Primary schools are being run by the Department of Education. States like Kerala (11.95 percent) and Tamil Nadu (39.80 percent) had only a few such schools in 2006-07.

Further, Table B7 shows that only 41.66 percent schools each of Primary integrated with Upper Primary and 33.15 percent Upper Primary integrated with Secondary & Higher Secondary schools are managed by the Department of Education. In states like Bihar (97.05 percent), Dadra & Nagar Haveli (96.08 percent), Jharkhand (92.70 percent), Lakshadweep (100.00 percent), Orissa (93.07 percent) and Tripura (97.62 percent), majority of Primary integrated with the Upper Primary schools are being run by the Department of Education. On the other hand, Andhra Pradesh (1.82 percent), Gujarat (6.91 percent), Maharashtra (0.71

percent) and Tamil Nadu (1.74 percent) have much less number of such schools being run by the state Education Department. Almost similar trend is noticed in the case of Upper Primary integrated with the Secondary and Higher Secondary schools run by the Department of Education.

Tribal/Social Welfare Department

The percentage of schools being run by the Tribal/ Social Welfare Department in 2006-07 is only 4.32, which is almost the same in the previous year, i.e, 4.51 percent. Except in the states of Chhattisgarh (39.86 percent), Madhya Pradesh (14.79 percent) and Manipur (22.59 percent), in all other states the percentage of schools being run by the respective state Tribal/Social Welfare Departments is much lower than the all-India average of 4.32 percent. Almost similar percentage share is observed in case of the other types of schools under the managements of Tribal/ Social Welfare Departments. However, the highest percentage is noticed in case of independent Upper Primary schools (8.39 percent) followed by Primary schools (4.59 percent). Further, it is observed that of the total integrated Higher Secondary schools, about 3.59 percent schools are being run under the Tribal/Social Welfare Departments which is quite similar to Upper Primary attached to Secondary and Higher Secondary schools (3.00 percent).

> "Except Chhattisgarh, Madhya Pradesh and Manipur, in all other states the percentage of schools being run by the respective state Tribal/Social Welfare Departments is much lower than the all-India average of 4.32 percent"

Local Body Managements

The percentage of schools under Local Body managements in 2006-07 (20.22 percent) shows slight improvement over the previous year (19.85 percent). However, in a few states, the percentage of such schools is higher than the all-India average. This percentage is as high as 38.21 in Andhra Pradesh, 75.67 in Gujarat, 67.16 in Maharashtra, 44.94 in Rajasthan and 55.39 in Tamil Nadu. The capital city of Delhi too has 40.53 percent of schools under Local Body managements. Rest of the states have below five percent schools being run by the Local Body managements. Notably the Primary integrated with the Upper Primary schools has the highest percentage under the management of the Local Bodies (28.11 percent). Similarly, the percentage of independent Primary schools is 21.79 (against 20.98 in 2005-06), and in case of Upper Primary integrated with the Secondary and Higher Secondary schools the percentage is 16.29 (against 15.28 in 2005-06). In the other school categories, it varies from 1.04 percent in case of independent Upper Primary schools to 28.11 percent in case of the Primary integrated with the Upper Primary schools. Majority of Primary schools in Andhra Pradesh (74.42 percent), Delhi (76.39 percent), Gujarat (77.15 percent), Maharashtra (85.63 percent), Rajasthan (75.33 percent) and Tamil Nadu (65.96 percent) were under Local Body managements in 2006-07.

Private Managements

As has already been presented above that 18.86 percent of the total 1.20 million schools are being managed by the Private aided and Unaided managements. However, in a few states the percentage of such schools is higher than the national average. The highest percentage of schools is observed in Kerala (58.27) and the lowest (1.55) in Bihar. More than 98 percent schools in Bihar are being managed by the Department of Education alone. Both private managements together also have high percentage in a few other states, such as Delhi (37.05), Jammu & Kashmir (20.47 percent), Karnataka (19.01), Maharashtra (28.39), Meghalaya (59.40), Puducherry (35.03), Rajasthan (21.26) and Uttar Pradesh (23.68). In most of these states, schools run by the Private Unaided managements are more than the same in case of Private Aided managements.

The state-wise distribution of schools having Private Aided managements shows that their number is as high as 55.24 percent in Kerala, 19.99 percent in Maharashtra, 22.82 percent in Goa, and 16.11 percent in Tamil Nadu. Delhi too has 6.58 percent schools under Private Aided managements and Chandigarh 3.93 percent. Meghalaya, a north-eastern state, has a high percentage (51.33) of such schools as in 2006-07. Rest of the major states, except Andhra Pradesh (3.53 percent), Assam 7.03 percent), Karnataka (4.40 percent), Uttar Pradesh (4.03 percent), and Uttarakhand (3.05 percent), have only a few Private Aided schools. Bihar too has a low percentage of 0.54.

Further, it has also been noticed that 30.38 percent Upper Primary integrated with the Secondary and Higher Secondary schools have Private Aided managements, and their percentage is almost the same as in the previous year. In the rest of the school categories, the percentage varies from 2.95 percent in case of Primary to 12.00 percent in case of Primary integrated with the Upper Primary, Secondary and Higher Secondary schools.

> "About 87.15 percent of the total 11,96,663 schools that impart elementary education in 2006-07 are located in rural areas. This percentage was 86.23 percent during the previous year"

It has also been observed that barring Primary integrated with Upper Primary, Secondary and Higher Secondary schools (29.24 percent), majority of other types of schools in Kerala has Private Aided management. Their percentage is as high as 55.54 in case of Primary and 54.46 in case of Primary with Upper Primary. Upper Primary only schools constitute 79.28 percent, and Upper Primary attached to Secondary and Higher Secondary schools are 60.22 percent. In addition to aided schools, a good number of schools in Kerala have Private Unaided managements. Meghalaya also have a good number of schools under Private Aided managements. Compared to other school types, Tamil Nadu also has a number of schools across school types that have Private Aided managements. States such as Bihar (8.97 percent), Kerala (29.24 percent), Meghalaya (62.83 percent), Uttar Pradesh (29.90 percent), Uttarakhand (22.02 percent) and West Bengal (34.00 percent) also have a good number of integrated Higher Secondary schools that have Private Aided managements. Delhi too has 12.06 percent of such schools under Private Aided managements. On the other hand, Lakshadweep and Nagaland have not reported any integrated Higher Secondary school under Private Aided management.

Table B7 also presents the number of schools having Private Unaided managements. It may also be noted that overall 22.51 percent (19.64 percent in 2005-06) Primary integrated with Upper Primary schools have Private Unaided managements compared to 5.20 percent under Private Aided managements. A few states have a higher percentage than the all-India average. On the other hand, in about 19 states, the percentage is lower than the national average of 22.51. Kerala has only 3.05 percent Primary integrated with Upper Primary schools under Private Unaided managements, compared to 67.52 percent such schools in Delhi.

It is further observed that 50.98 percent (48.00 percent in 2005-06) of total integrated Higher Secondary schools have Private Unaided managements. In this type of schools, the percentage of Private Unaided management is the highest amongst all other management types, including Government managements. In a few states, such as Chandigarh (29.46 percent), Chhattisgarh (66.47 percent), Delhi (49.63 percent), Gujarat (68.48 percent), Himachal Pradesh (94.88 percent), Karnataka (73.61 percent), Madhya Pradesh (80.06 percent), Mizoram (82.35 percent), Nagaland (95.63 percent), Puducherry (54.55 percent), Rajasthan (70.64 percent), and Uttar Pradesh (50.36 percent), majority of integrated Higher Secondary schools have Private Unaided managements. On the other hand, the percentage of such schools in Kerala is only 13.14. It may be noted that more than 55 percent of the total schools in Kerala are being managed by the Private managements and percentage of such Primary schools is as high as 55.54 percent. In Gujarat, 53.15 percent, and Karnataka, 37.13 percent Upper Primary attached with Secondary and Higher Secondary schools have private unaided managements compared to 66.67 percent in Mizoram, and 25.22 percent in Uttar Pradesh.

Schools Located in Rural Areas

It may be recalled that the rural population of the country is about 72 percent. Against this, 87.15 percent of the total 11,96,663 schools that impart elementary education in 2006-07 are located in rural areas. This percentage was 86.23 percent during the previous year.

Further, it is observed that barring the states of Chandigarh (19.66 percent), Daman & Diu (62.79 percent), Delhi (21.99 percent), Maharashtra (78.89 percent), Mizoram (68.73 percent) and Puducherry (53.29 percent), percentage of schools in rural areas in the rest of the states is above 80. A few states, such as Arunachal Pradesh (94.26 percent), Assam (94.45 percent), Bihar (93.09 percent), Chhattisgarh (92.0 percent), Himachal Pradesh (95.52 percent), Jharkhand (94.96 percent), Lakshadweep (96.67 percent), Meghalaya (93.41 percent), Orissa (92.92 percent), Sikkim (95.51 percent), Tripura (93.59 percent), Uttar Pradesh (90.35 percent) and Uttarakhand (82.2 percent) have above 90 percent of the schools located in rural areas as in 2006-07.

Table B8

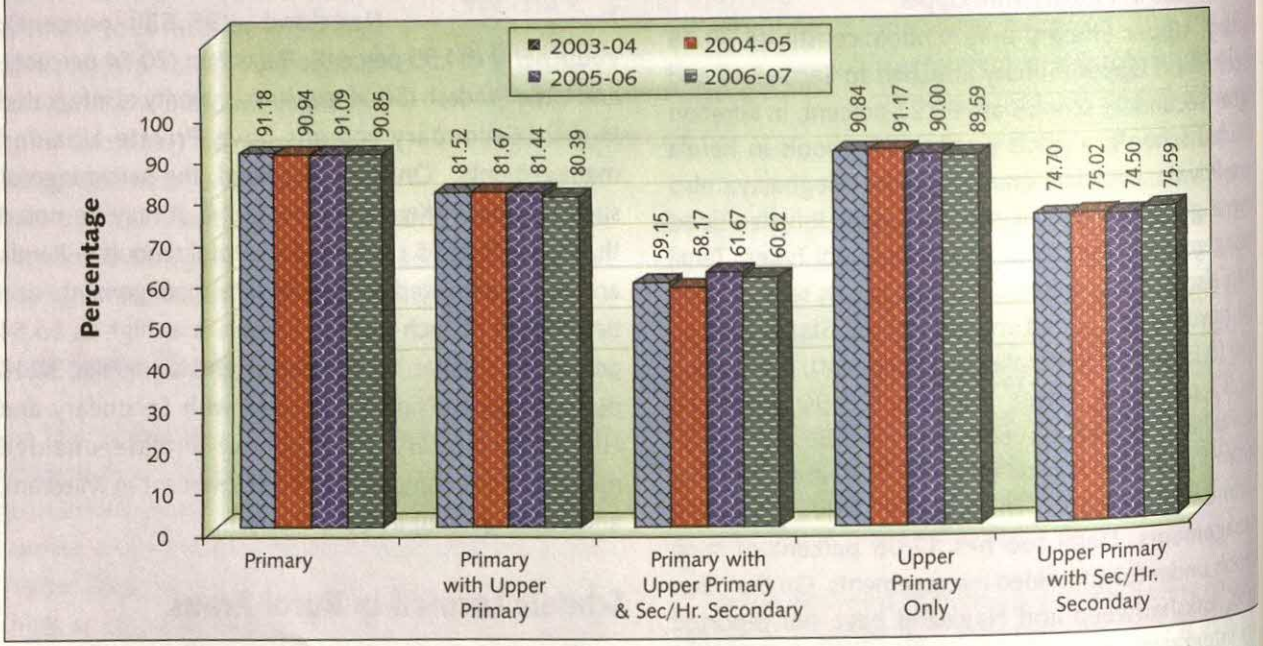
Percentage of Schools in Rural Areas : 2002-03 to 2006-07

School Category	Year				
	2002-03	2003-04	2004-05	2005-06	2006-07
Primary Only	90.93	91.18	90.94	91.09	90.85
Primary with Upper Primary	82.68	81.52	81.67	81.44	80.39
Primary with Upper Primary & Secondary/ Hr. Secondary	58.29	59.15	58.17	61.67	60.62
Upper Primary Only	90.54	90.84	91.17	90.00	89.59
Upper Primary & Secondary/ Hr. Secondary	75.79	74.70	75.02	74.50	75.59
All Schools	**87.00**	**87.12**	**86.90**	**87.23**	**87.15**

Note: Totals may not add to hundred because of no-responses and rounding of figures.

Figure 2.6

Percentage Share of Schools in Rural Areas by Category : All States



Further, it has also been noticed that majority of schools, except integrated Higher Secondary schools (60.62 percent), are located in rural areas. The percentage is as high as 90.85 in case of independent Primary schools, 89.59 in case of independent Upper Primary schools, 80.39 in case of Primary integrated with Upper Primary, and 75.59 in case of Upper Primary integrated with Secondary and Higher Secondary schools. On the other hand, of the total 29,312 integrated Higher Secondary schools, only 60.62 percent schools are located in rural areas, which is much lower than the other types of schools located in these areas. The distribution of schools by management in rural areas does not show any significant deviation from the distribution of schools by management in all areas.

"Of the total 29,312 integrated Higher Secondary schools, only 60.62 percent schools are located in rural areas, which is much lower than the other types of schools located in these areas"

So far as Primary schools are concerned, about 91 percent of the total 7,79,482 Primary schools are located in rural areas (Table B8). However, the percentage of such schools in 21 states is well above the average of all the 35 states. In the states of Andaman & Nicobar Islands (96.83 percent), Arunachal Pradesh (96.85 percent), Assam (95.01 percent), Bihar (94.28 percent), Chhattisgarh (94.66 percent), Haryana (91.50 percent), Himachal Pradesh (97.16 percent), Jammu & Kashmir (92.55 percent), Jharkhand (96.81 percent), Lakshadweep (93.75 percent), Madhya Pradesh (92.37 percent), Meghalaya (95.51 percent), Nagaland (92.61 percent), Orissa (94.01 percent), Punjab (91.00 percent), Rajasthan (92.06 percent), Sikkim (96.93 percent), Tripura (96.45 percent), Uttar Pradesh (91.29 percent) and Uttarakhand (94.20 percent), more than 90 percent of Primary schools are located in rural areas. On the other hand, the percentage of such schools in Delhi is as low as 25.34 and in

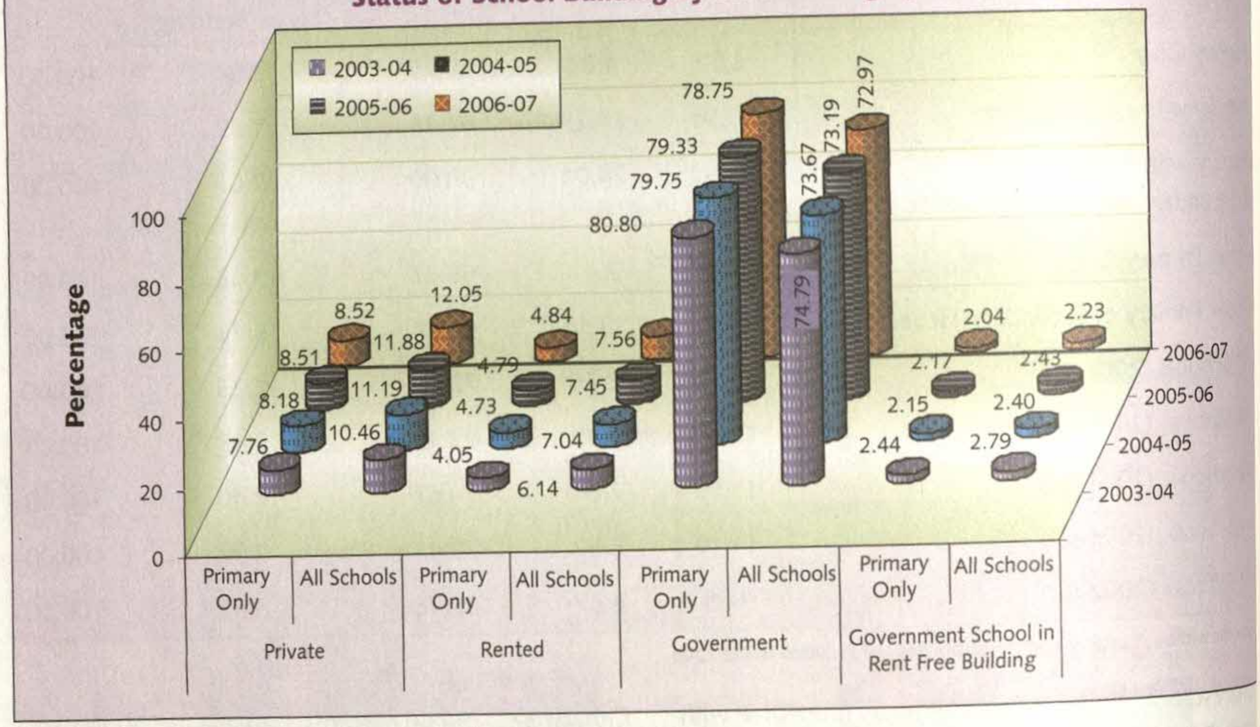
Table B9
Status of School Buildings by Category : 2006-07

School Category	Building Status				
	Private	Rented	Government	Government School in Rent-Free Building	Total*
Primary Only	8.52	4.84	78.75	2.04	100.00
Primary with Upper Primary	15.95	14.29	67.14	1.29	100.00
Primary with Upper Primary & Secondary/Hr. Secondary	39.92	24.01	30.00	2.63	100.00
Upper Primary Only	17.66	2.41	68.47	3.08	100.00
Upper Primary & Secondary/Hr.Secondary	19.89	19.18	52.54	5.78	100.00
All Schools (2006-07)	**12.05**	**7.56**	**72.97**	**2.23**	**100.00**
All Schools (2005-06)	11.88	7.45	73.19	2.43	100.00
All Schools (2004-05)	11.19	7.04	73.67	2.40	100.00
All Schools (2003-04)	11.10	6.52	79.41	2.97	100.00
All Schoos (2002-03)	9.55	6.57	80.46	3.41	100.00

* Schools without building and no responses are included in the total.

Chandigarh 34.48. In all other states, the percentage is well above 80. All the independent Upper Primary schools in Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Lakshadweep, Puducherry and Sikkim, and 98.21 percent schools in Himachal Pradesh, are located in rural areas. Assam, Chhattisgarh and Punjab too have a very high percentage of Upper Primary schools (about 94 percent) located in rural areas.

Figure 2.7
Status of School Building by School Category : All States



Status of School Buildings

The status of school buildings, as reported, is of four types: Private, Rented, Government and Government School in Rent-Free Building. About 72.97 percent of the total 11,96,663 schools have government buildings and 12.05 percent schools have private buildings. Another 7.56 percent schools have rented buildings (Table B9).

Compared to 8.52 percent Primary schools having private buildings, the percentage of other types of schools having private building is high. About 40 percent integrated Higher Secondary schools have private buildings, 30 percent have government buildings, and 24 percent such schools have rented buildings. About 19 percent Upper Primary attached to Higher Secondary schools also have rented buildings, compared to 14.29 percent Primary with Upper Primary schools. Altogether about 2.23 percent government schools are run in rent-free buildings and another 7.56 percent in rented buildings. Government and aided schools having rented buildings can be provided buildings under the SSA on priority basis.

Type of School Building

From the DISE database, type of building a school has can be known in case of each of 1.20 million schools imparting elementary level of education across the country. To examine this, percentage distribution of schools is presented by type of building. *Pucca* (permanent), partially *pucca* (semi-permanent), *kuchcha* (temporary), tent and multiple types are the different types of buildings that the schools have. Schools having more than one type of building are termed as having a multiple-type building. Irrespective of the school type, the percentage of schools with *pucca* building in urban areas is higher than the same in the rural areas. All schools together in rural areas having *pucca* building constitute 69.88 percent (70.36 percent in

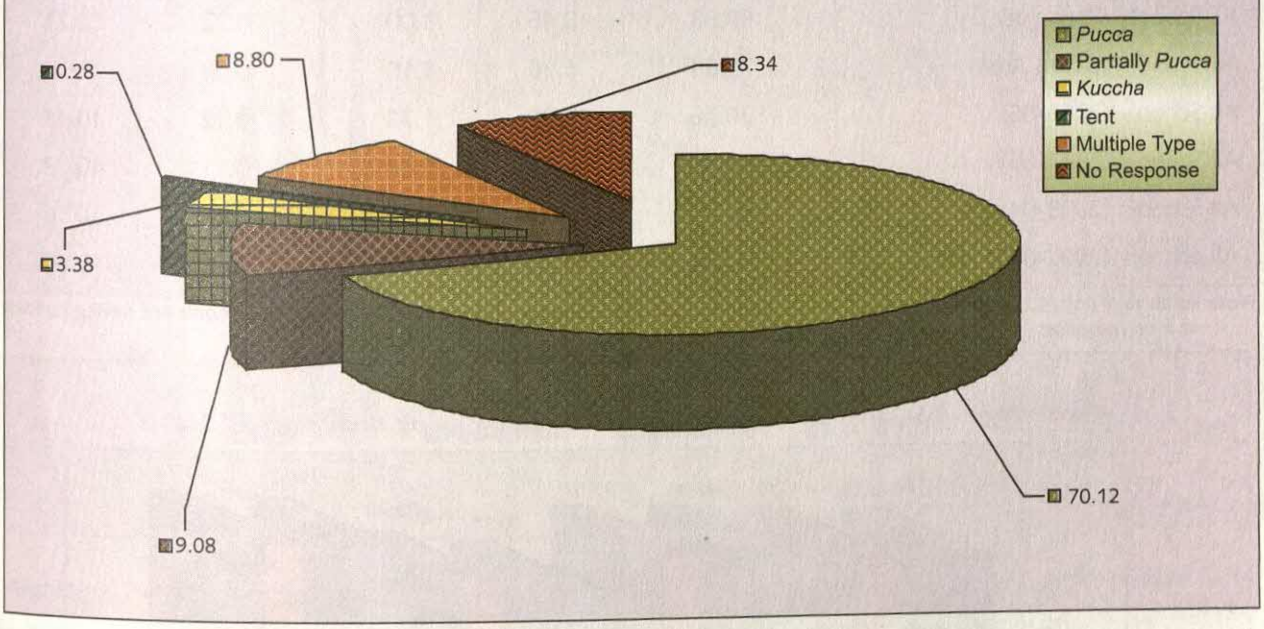
2005-06) against 76.84 percent (74.57 percent in 2005-06) in urban areas. About 8.23 percent (8.39 percent in 2005-06) schools have partially *pucca* building, 8.45 percent are in rural areas and 6.76 percent (8.61 and 7.06 percent in 2005-06) are in urban areas. About 3.00 percent and 1.10 percent (1.91 percent and 0.88 percent in 2005-06) schools (total) respectively in rural and urban areas, have *kuchcha* buildings. Irrespective of the school type and area, a few schools are functioning in tents. Both in percentage and absolute number, such schools are only a few. A large number of schools, both in rural (10.71 percent) and urban areas (7.61 percent), have multiple-type buildings (Table B 10).

The distribution of schools by type of building shows that 70.12 percent (71.31 percent in 2005-06) Primary schools have *pucca* (permanent) buildings as compared to 9.08 percent (9.47 percent schools in 2005-06) having partially *pucca* buildings and another 3.38 percent (1.98 percent in 2005-06) *kuchcha* (temporary) buildings. Only a few Primary schools (0.28 percent against 0.14 percent in 2005-06) are functioning in tents. In addition, about 8.80 percent Primary schools had multiple-type school buildings in 2005-06. This, otherwise, indicates that a good number of Primary schools are yet to be provided with a *pucca* school building, provision for which should be made under SSA without delay.

Primary Schools

A cursory look at the state-specific percentages of schools having *pucca* building reveals that barring Daman & Diu, none of the other states have provided a *pucca* building to all of its Primary schools. The provision of *pucca* building varies from 100 percent in Daman & Diu to 7.02 percent in Mizoram. Further, it is observed that the percentage of schools having *pucca* building in case of all the north-eastern states is very low. It varies from 7.34 percent in Manipur to 49.85 percent in Tripura. The percentage of such schools in Kerala is 77.34, 55.33 in Tamil Nadu, and 51.10 in Delhi. About 75 percent Primary schools in Bihar and 89 percent in Rajasthan also have *pucca* school buildings compared to 48.90 percent in Jharkhand. Further, it may be observed that states having more than 80 percent Primary schools with *pucca* buildings are Chandigarh (93.33 percent), Goa (96.50 percent), Haryana (94.58 percent), Karnataka (90.36 percent), Maharashtra (84.01 percent), Punjab (96.93 percent), Uttar

Figure 2.8
Percentage Distribution of Primary Schools by Type of Building : 2006-07
All States



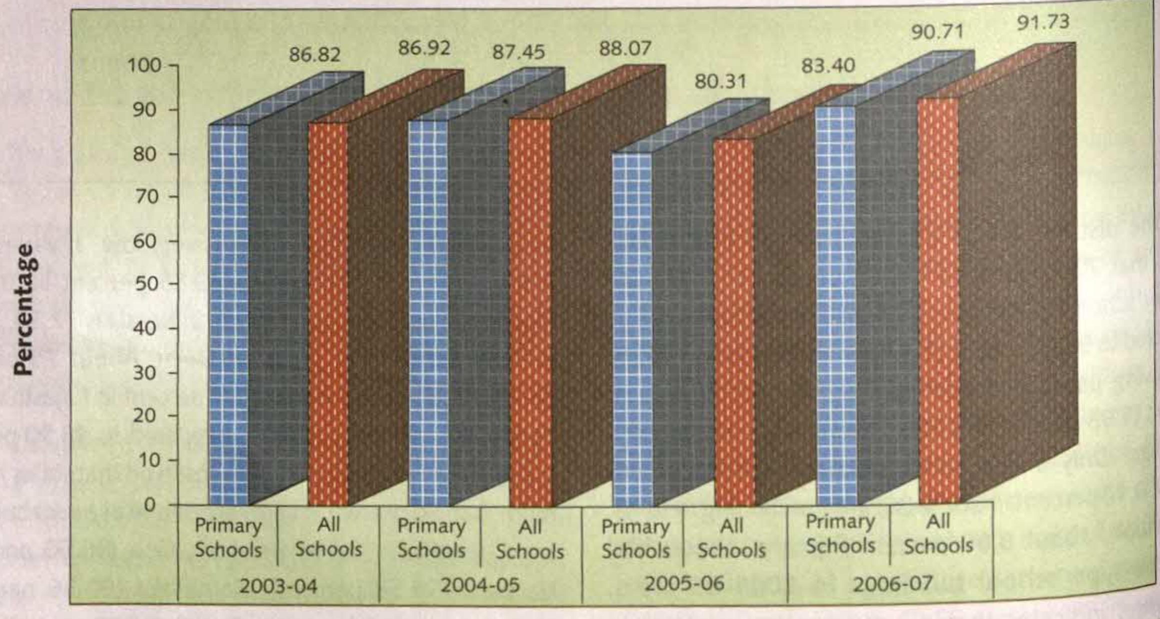
Pradesh (96.44 percent) and Uttarakhand (92.64 percent). However, Orissa (24.64 percent) perhaps has the lowest percentage of Primary schools that have *pucca* buildings amongst the larger states.

Table B10
Percentage of Schools by Type of Building : 2006-07

School Category	Type of Building				
	Pucca	Partially *Pucca*	*Kuchcha*	Tent	Multiple Type
Primary Only	70.12	9.08	3.38	0.28	8.80
Primary with Upper Primary	72.58	6.28	0.93	0.05	16.06
Primary with Upper Primary & Secondary/ Hr. Secondary	75.85	6.52	1.32	0.05	10.43
Upper Primary Only	70.42	7.69	2.87	0.06	7.62
Upper Primary & Secondary/Hr. Secondary	70.52	6.19	1.88	0.05	14.82
All Schools (All Areas)	**70.63**	**8.23**	**2.76**	**0.20**	**10.31**
All Schools (Rural Areas)	69.88	8.45	3.00	0.22	10.71
All Schools (Urban Areas)	76.84	6.76	1.10	0.09	7.61
All Schools (2005-06)	70.56	8.39	1.78	0.12	10.41
All Schools (2004-05)	69.96	9.19	1.84	0.11	10.23
All Schools (2003-04)	69.29	10.09	2.01	0.15	10.16
All Schools (2002-03)	68.81	9.72	2.27	0.18	10.09

Note: Totals may not add up to hundred because of no-responses. The difference may be attributed to both schools not having building and no responses.

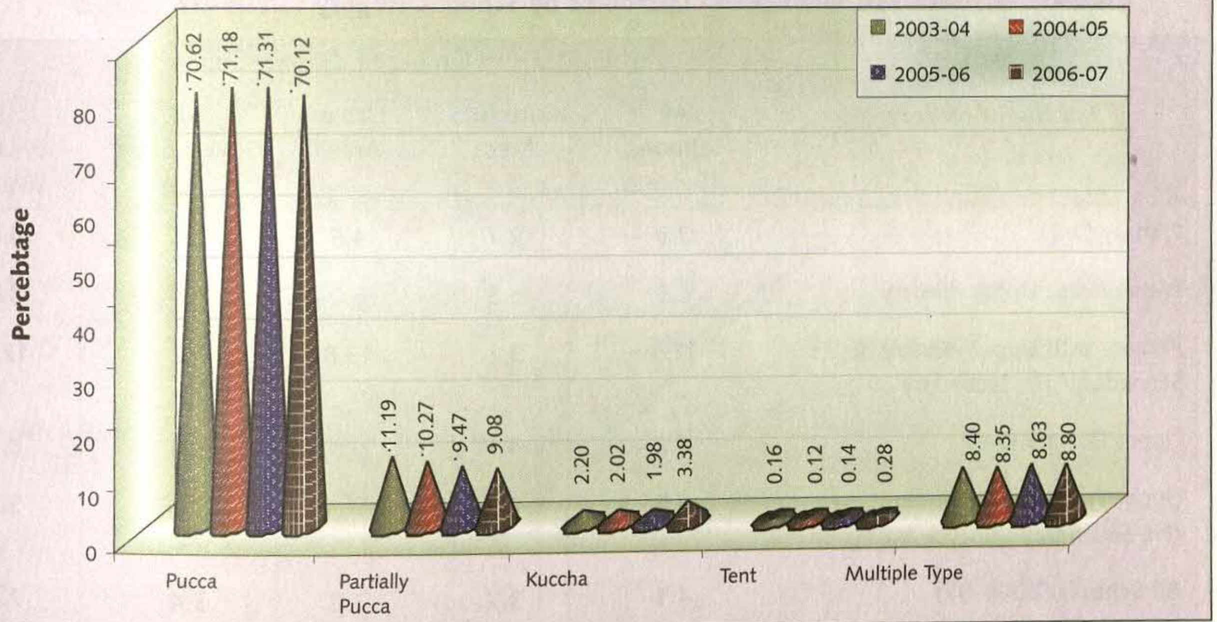
Figure 2.9
Percentage of Schools Established since 1994 and Having Building : All States



The percentage of Primary schools having partially *pucca* building (9.08 percent) is lower than the schools having *pucca* buildings (70.12 percent). However, Andaman & Nicobar Islands (21.16 percent), Dadra & Nagar Haveli (41.83 percent), Jammu & Kashmir (21.45 percent), Lakshadweep (20.00 percent), Orissa (34.84 percent), Tamil Nadu (18.38 percent) and West Bengal (11.39 percent) are a few states which have got higher percentage of Primary schools with partially *pucca* buildings than the other states. In north-eastern states, the percentage of schools having partially *pucca* buildings is also high. The percentage is as high as 52.30 in Meghalaya, 74.35 in Mizoram, 46.09 in Nagaland, 23.95 in Assam, 37.19 in Manipur, 30.18 in Sikkim, 22.63 in Arunachal Pradesh and 13.91 in Tripura. These states also have a good percentage of schools that have *kuchcha* buildings. In the capital city of Delhi, 16.99 percent Primary schools have partially *pucca* school buildings compared to 51.10 *pucca* and 30.81 percent multiple type buildings. The number of Primary schools having *kuchcha* building is significant in the states of Arunachal Pradesh (26.09 percent), Assam (28.76 percent), Himachal Pradesh (3.20 percent), Jammu & Kashmir (9.06 percent), Manipur (42.02 percent), Meghalaya (13.50 percent), Mizoram (14.55 percent), Nagaland (29.32 percent), Sikkim (12.98 percent) and Tripura (10.64 percent). The condition of classrooms also reveals that majority of classrooms in north-eastern states need either minor or major repairs.

Figure 2.10

Percentage Distribution of Primary Schools with Type of Building



Elementary Schools

About 72.58 percent (69.88 percent in 2005-06) Elementary schools have *pucca* buildings compared to 6.28 percent (5.77 percent in 2005-06) schools having partially *pucca* buildings and another 0.93 percent (0.94 percent in 2005-06) having *kuchcha* buildings. About 16 percent (17 percent in 2005-06) such schools have multiple-type of school buildings. It may also be noticed that almost the same percentage of Primary and Elementary schools have pucca buildings (around 70 percent). In 12 States & UTs, more than 80 percent Elementary schools have pucca buildings. Further, it is observed that in Chandigarh, Goa, Haryana, Himachal

> "About 72.58 percent Elementary schools have *pucca* buildings compared to 6.28 percent schools having partially *pucca* buildings and another 0.93 percent having *kuchcha* buildings"

Pradesh, Karnataka, Punjab, Uttar Pradesh and Uttarakhand, more than 90 percent of all such schools have *pucca* buildings. Delhi (82.64 percent), Gujarat (82.53 percent) and Maharashtra (81.28 percent),) are a few states where more than 80 percent Elementary schools have *pucca* buildings. There are only 0.05 percent Elementary schools in the country functioning in tents.

Upper Primary Schools

It may be observed that only 70.42 percent (68.19 percent in 2005-06) independent Upper Primary schools have *pucca* buildings. In Chandigarh and Daman & Diu, all independent Upper Primary schools have *pucca* school buildings compared to no such school in Puducherry; though the number of such schools in these states is very small. About 88 percent Upper Primary schools in Manipur have either *kuchcha* or partially *pucca* school buildings. On the other hand, most of such schools in Goa (96.88 percent), Gujarat (94.47 percent), Haryana (96.53 percent), Punjab (96.74 percent), Rajasthan (88.89 percent), Uttar Pradesh (96.05 percent) and Uttarakhand (94.73 percent) have *pucca* buildings. More than 51 percent such schools in Delhi had *pucca* school buildings in 2006-07. Amongst the larger states, Assam has a low percentage of such schools (28.91). Mizoram too has only 9.46 percent such schools. Madhya Pradesh and Kerala respectively have 61.57 and 70.24 percent Upper Primary schools with *pucca* buildings. Percentage of independent Upper Primary schools having partially *pucca* buildings is 7.69 percent (8.56 percent in 2005-06), compared to 2.87 percent (2.69 percent in 2005-06) schools having *kuchcha* building in 2006-07.

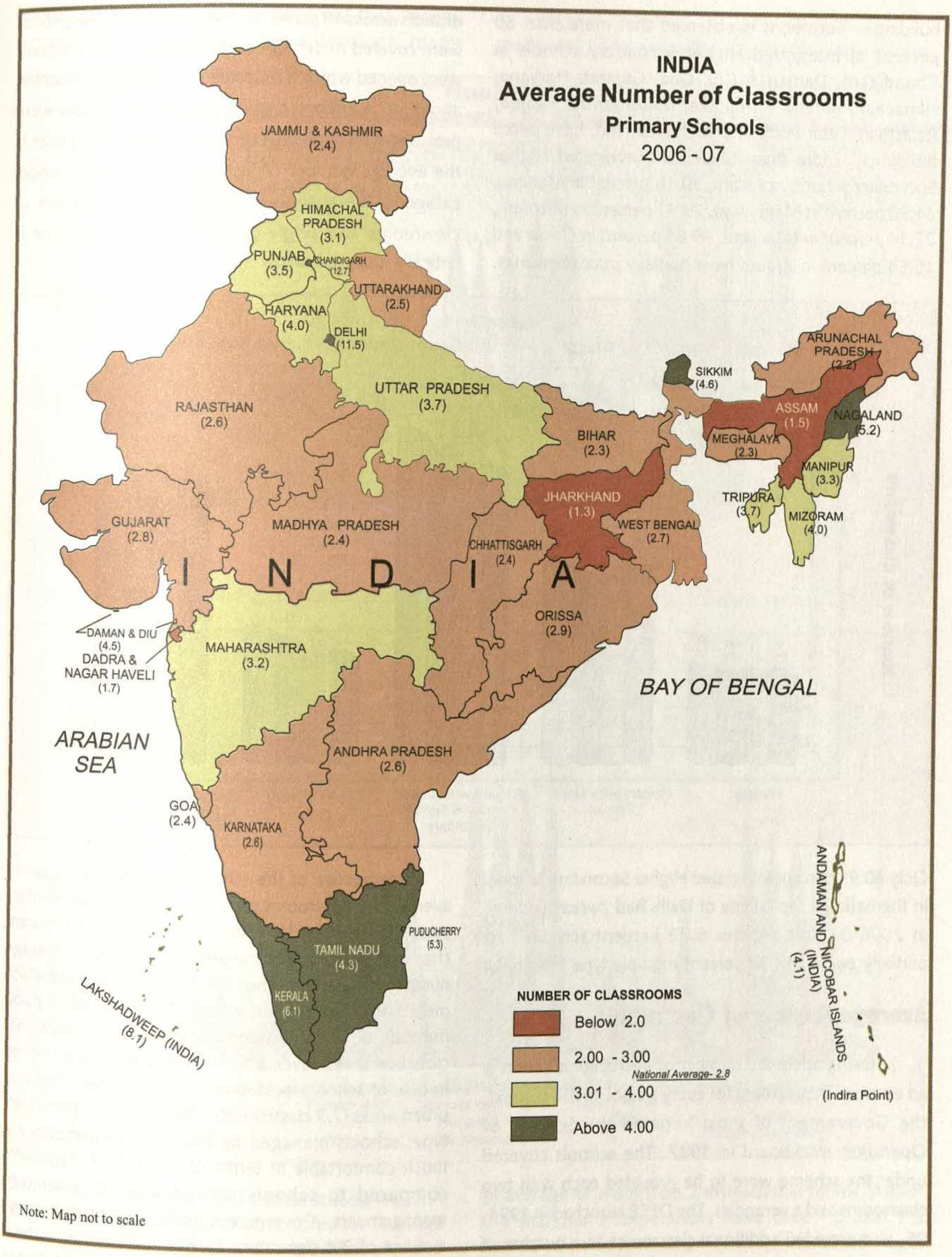
Table B11

Average Number of Classrooms by School Category : 2006-07

School Category	Number of Classrooms				
	All Schools/ All Areas	Rural Areas	Urban Areas	All Government Schools	All Private Schools
Primary Only	2.8	2.7	4.6	2.6	4.8
Primary with Upper Primary	6.3	5.8	8.0	5.6	8.0
Primary with Upper Primary & Secondary/ Hr. Secondary	11.0	9.2	13.8	9.2	12.0
Upper Primary Only	4.7	4.1	9.8	3.6	8.1
Upper Primary & Secondary /Hr. Secondary	8.5	7.5	11.4	7.2	9.9
All Schools (2006-07)	**4.1**	**3.7**	**7.3**	**3.4**	**7.3**
All Schools (2005-06)	3.8	3.5	6.7	3.2	7.2
All Schools (2004-05)	3.7	3.3	6.6	3.1	7.1
All Schools (2003-04)	3.7	3.3	6.7	3.1	7.4
All Schools (2002-03)	3.5	3.2	6.5	2.9	7.5

Higher Secondary Schools

It may be noticed that it is not all the integrated Higher Secondary schools that have a *pucca* building. Only 75.85 percent integrated Higher Secondary schools have *pucca* buildings, 6.52 percent have partially *pucca*, and 1.32 percent only *kuchcha* buildings. About 10.43 percent of such schools have multiple-type of schoo



Note: Map not to scale

Map 2.2

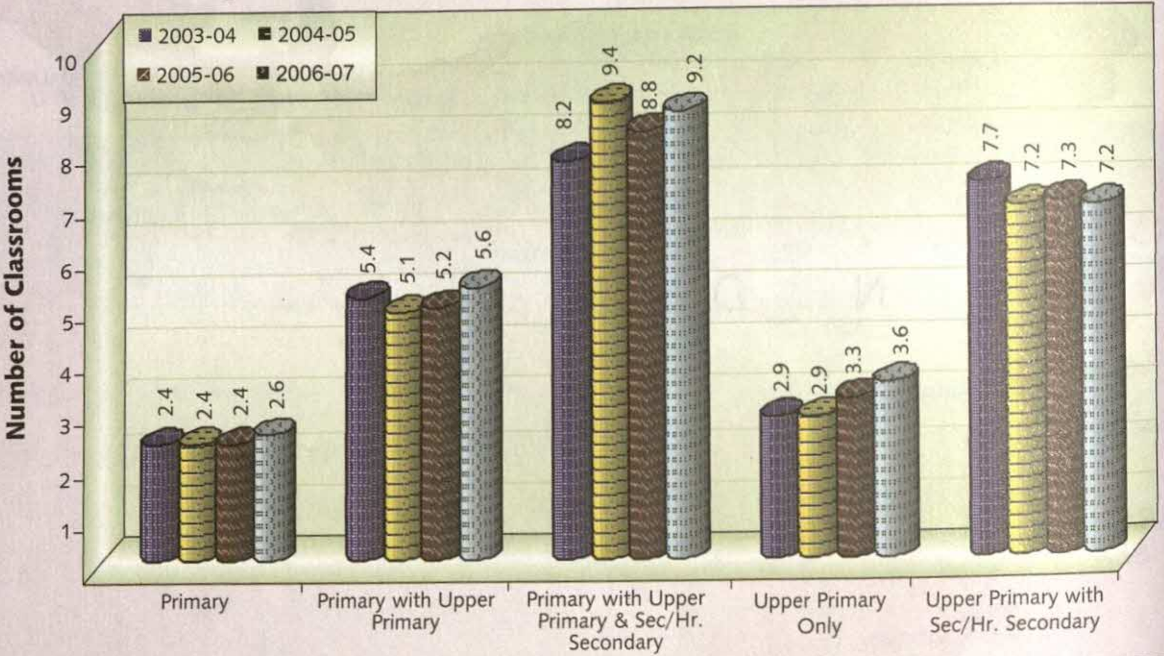
buildings. Further, it is observed that more than 80 percent of integrated Higher Secondary schools in Chandigarh, Daman & Diu, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Maharashtra, Punjab, Rajasthan, Uttar Pradesh and Uttarakhand, have pucca buildings. More than 22 percent integrated Higher Secondary schools in Assam, 30.18 percent in Manipur, 31.86 percent in Meghalaya, 29.41 percent in Mizoram, 23.14 percent in Nagaland, 49.84 percent in Orissa and 15.64 percent in Tripura have partially *pucca* buildings.

Only 60.91 percent integrated Higher Secondary schools in the national capital city of Delhi had *pucca* buildings in 2006-07 and another 6.82 percent schools had partially *pucca* and 32 percent multiple type buildings.

Average Number of Classrooms

Having adequate number of instructional rooms is an essential requirement for every school. In this context, the Government of India initiated the Scheme of Operation Blackboard in 1987. The schools covered under the scheme were to be provided each with two classrooms and a verandah. The DPEP, launched in 1994-95, also provided additional classrooms to a number of schools but only to Primary schools/sections and in 272 districts across 18 states. In 2001, the remaining districts were covered under SSA and a number of new schools were opened which is reflected in the analysis presented above. In addition, a good number of schools were provided with additional classrooms. Table B11 presents the average number of instructional rooms by school category. The analysis in case of average number of classrooms and single-classrooms by school type is critically analysed below.

Figure 2.11
Average Number of Classrooms : All Government Managed Schools



Irrespective of the school type, there were on an average 4.1 classrooms per school imparting elementary education across 35 states in 2006-07. Significant change is noticed over the previous year as the average number of classrooms then was only 3.8 per school which means that during the intermediary period, a good number of schools were provided with additional classrooms. However, a significant difference is noticed in case of schools located in rural (3.7 classrooms) and urban areas (7.3 classrooms). Irrespective of the school type, schools managed by Private managements are much comfortable in terms of number of classrooms compared to schools managed by Government managements. Government managed schools have an average of 3.4 classrooms (3.2 in 2005-06) per school compared to 7.3 classrooms in a Private school (7.2 in

2005-06). Further, it may be observed that Primary schools have an average of 2.8 instructional rooms (Government schools - 2.6 and Private schools - 4.8). A significant difference is also noticed in the average number of instructional rooms in Primary schools located in rural (2.7 classrooms) and urban (4.6 classrooms) areas.

Figure 2.12
Average Number of Classrooms : All Private Managed Schools

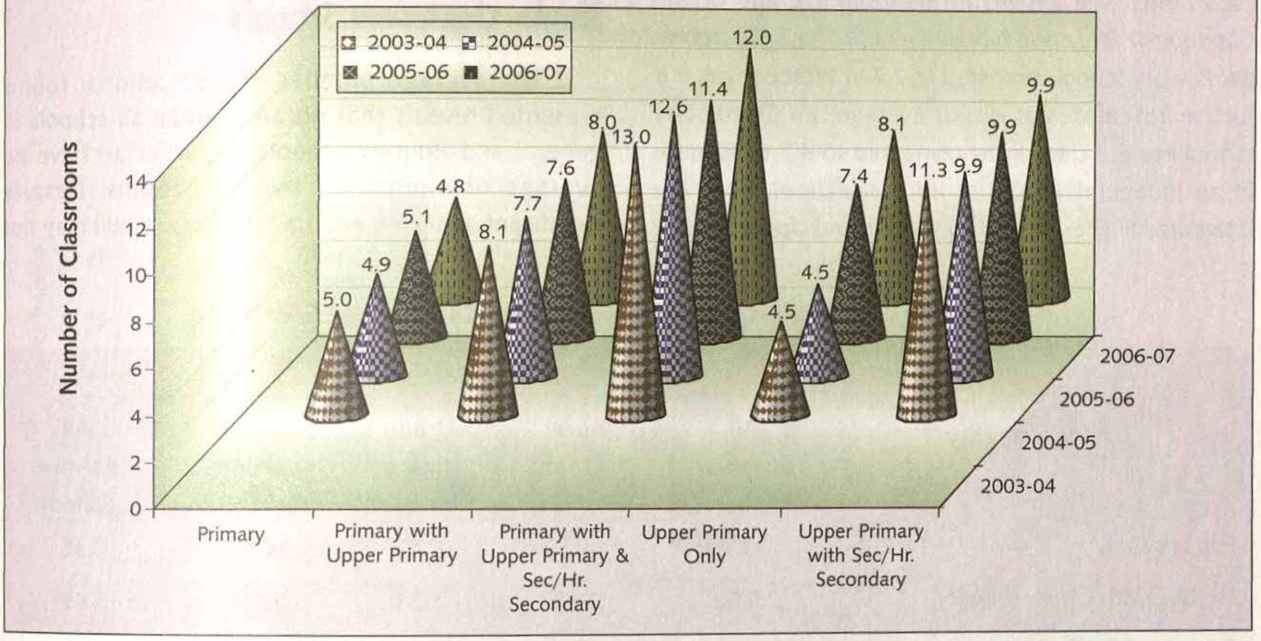
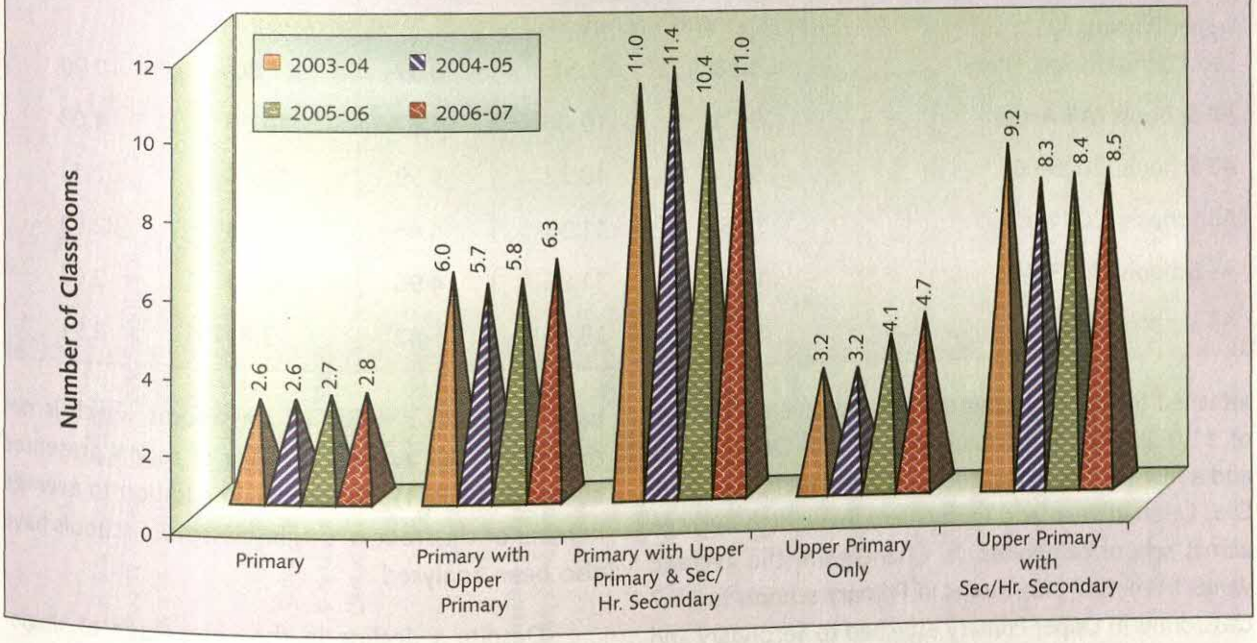


Figure 2.13
Average Number of Classrooms : All States



Except in Assam, Dadra & Nagar Haveli and Jharkhand, Primary schools in all other States & UTs have an average of more than 2 instructional rooms. Assam and Jharkhand respectively have only 1.5 and 1.3 classrooms per school compared to 1.7 in Dadra & Nagar Haveli. Chandigarh (12.7 classrooms), Delhi (11.5

classrooms), Kerala (6.1 classrooms), Nagaland (5.2 classrooms), Mizoram (4.0 classrooms), Puducherry (5.3 classrooms), Punjab (3.5 classrooms) and Himachal Pradesh (3.1 classrooms), have average number of classrooms well above the national average of 2.8 classrooms. Bihar also has an average of 2.3 classrooms per Primary school compared to 2.7 in West Bengal. It is further revealed that on an average, an Elementary school has 6.3 classrooms compared to 4.7 classrooms in an independent Upper Primary school. Both the integrated Higher Secondary schools and Upper Primary attached to Higher Secondary schools have an average of 11.0 and 8.5 classrooms respectively. Delhi, Kerala and a few smaller states, such as Chandigarh, Daman & Diu, Lakshadweep and Puducherry, have high average across school categories. In Chandigarh, the average varies from 12.7 classrooms in Primary schools to 35.7 classrooms in Upper Primary attached to Secondary and Higher Secondary schools, and in Kerala, it varies from 6.1 classrooms in Primary schools to 23.3 classrooms in an integrated Higher Secondary school. In Delhi, Primary schools have an average of 11.5 classrooms compared to 14.6 in Elementary, 26.0 in integrated Higher Secondary, 12.0 in independent Upper Primary, and 22.1 in Upper Primary attached to Secondary and Higher Secondary schools.

Single-Classroom Schools

The average number of instructional rooms presented reveals that on an average all schools in general and Primary schools in particular, have an average of more than two classrooms. Despite significant achievements, a few schools still may not have adequate number of classrooms which is not reflected in the average number of rooms presented above (Table B11). Therefore, in addition to average number of classrooms, single-classroom schools have also been analysed.

Table B12

Percentage of Single-Classroom Schools by Category : 2006-07

School Category	Percentage				
	All Schools/ All Areas	Rural Areas	Urban Areas	All Government Schools	All Private Schools
Primary Only	13.79	14.33	8.43	14.53	7.36
Primary with Upper Primary	1.62	1.65	1.51	1.69	1.45
Primary with Upper Primary & Secondary/ Hr. Secondary	1.22	1.53	0.75	1.73	0.89
Upper Primary Only	3.75	3.90	2.47	3.40	4.91
Upper Primary & Secondary/Hr. Secondary	1.38	1.64	0.57	1.80	0.90
All Schools (All Areas)	**9.71**	**10.46**	**4.67**	**10.95**	**4.09**
All Schools (2005-06)	9.54	10.37	3.99	11.04	2.43
All Schools (2004-05)	10.39	11.33	4.45	11.78	2.62
All Schools (2003-04)	10.94	11.86	4.96	12.24	2.62
All Schools (2002-03)	12.08	13.05	5.82	13.35	2.51

Despite a decline in the percentage of single-classroom schools during the period 2002-03 to 2006-07 (Table B12), DISE data, however, reveals that still a good number schools in the country have only one classroom. In 2002-03, the percentage of single-classroom schools was as high as 12.08 compared to 9.71 percent in 2006-07 for which the available DISE data is the latest. However, the percentage is slightly higher from 9.54 in 2005-06 to 9.71 in 2006-07. Though the majority of single-classroom schools (13.79 percent in 2006-07) are Primary schools, yet a good number of other types of schools also have single classroom. In other school types, the percentage varies from 1.22 in case of integrated Higher Secondary schools to 1.38 in case of Upper Primary attached to Secondary and Higher

Figure 2.14

Percentage of Single-Classroom Schools by School Category

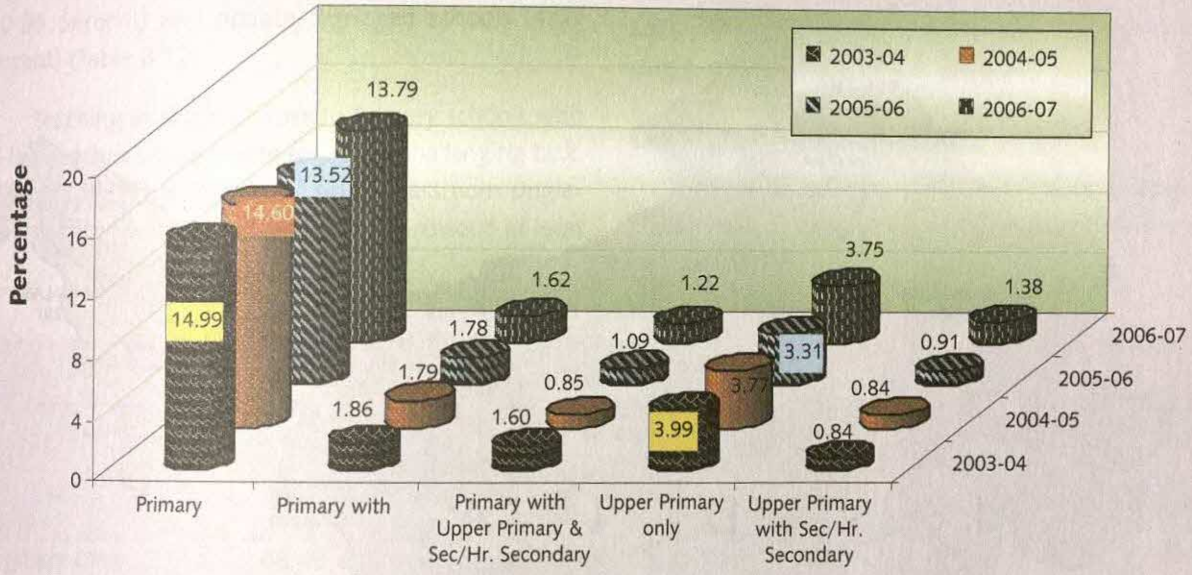
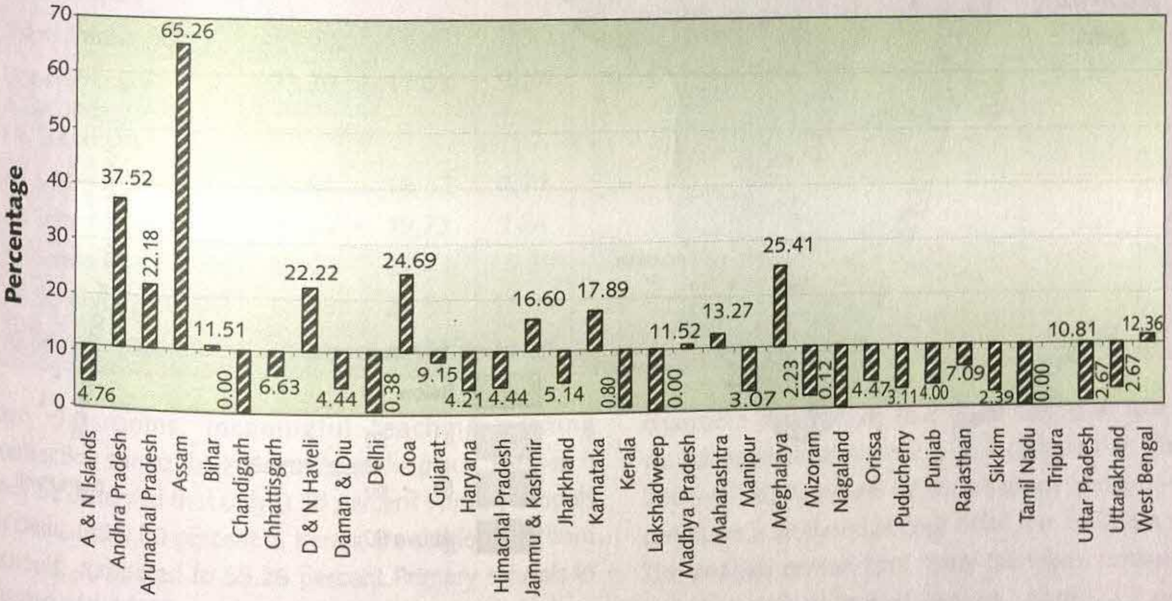
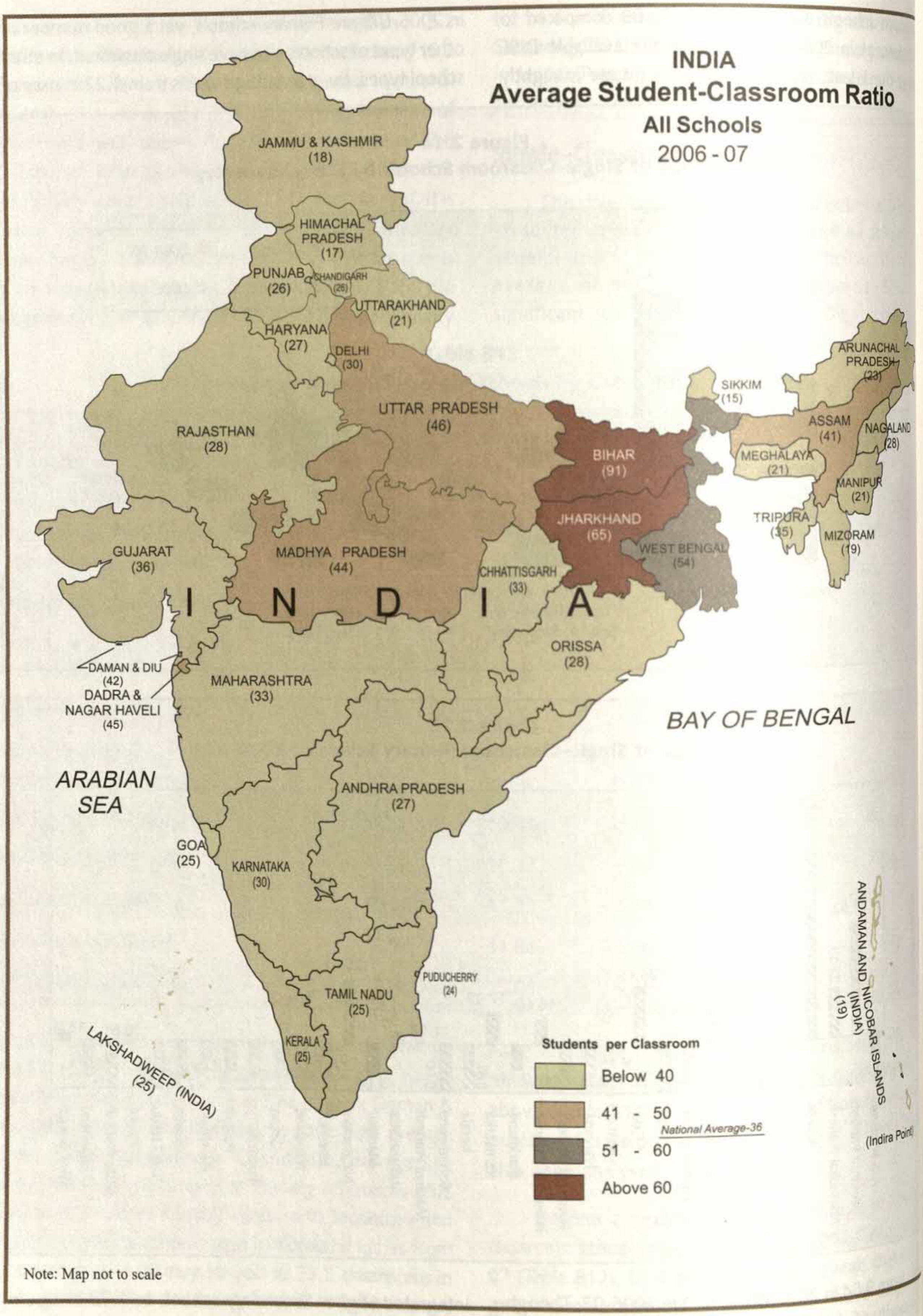


Figure 2.15

Percentage of Single-Classroom Primary Schools : 2006-07





INDIA
Average Student-Classroom Ratio
All Schools
2006 - 07

Note: Map not to scale

Map 2.3

Secondary schools, 1.62 in case of independent Elementary and 3.75 in case of independent Upper Primary schools. Irrespective of the school type, percentage of single-classroom schools is much lower in urban areas (4.67 percent) than in rural areas (10.46 percent). Further, a marked difference in percentage of single-classroom schools is noticed in case of government (10.95 percent) and private managed schools (4.09 percent) (Table B 12).

Teaching in single-classroom Primary schools with all the children sitting in one room is a challenging task. It is specially true in case of single-classroom single-teacher schools. Unless all schools are provided at least two classrooms, meaningful teaching-learning transaction cannot be expected to take place. Further, it may be observed that only 0.38 percent Primary schools in Delhi and 0.80 percent in Kerala are single-classroom schools, compared to 65.26 percent Primary schools in Assam and 16.60 percent in Jammu & Kashmir. In a few other states, like Andhra Pradesh (37.52 percent), Bihar (11.51 percent), Goa (24.69 percent), Gujarat (9.15 percent), Karnataka (17.89 percent), Meghalaya (25.41 percent), Maharashtra (13.27 percent), Madhya Pradesh (11.52 percent), Tripura (10.81 percent) and West Bengal (12.36 percent), the number of single-classroom Primary schools is high. Assam also has comparatively a high percentage of other types of schools that have only single classroom. On the other hand, Chandigarh, Lakshadweep and Tamil Nadu did not report any single-classroom school in 2006-07.

Condition of Classrooms

A few schools do not have adequate number of classrooms. Even some such schools that have a classroom may not be in a good condition and hence would need repairs. This is also reflected in the DISE 2006-07 data when distribution of classrooms by condition is analysed in case of all the 35 States & UTs. The analysis reveals that many (all types) schools need either major or minor repairs. About 73 percent classrooms (all types) in 2006-07 (71 percent in 2005-06 against 68.48 percent in 2004-05) are of good condition and remaining 27 percent needed either major

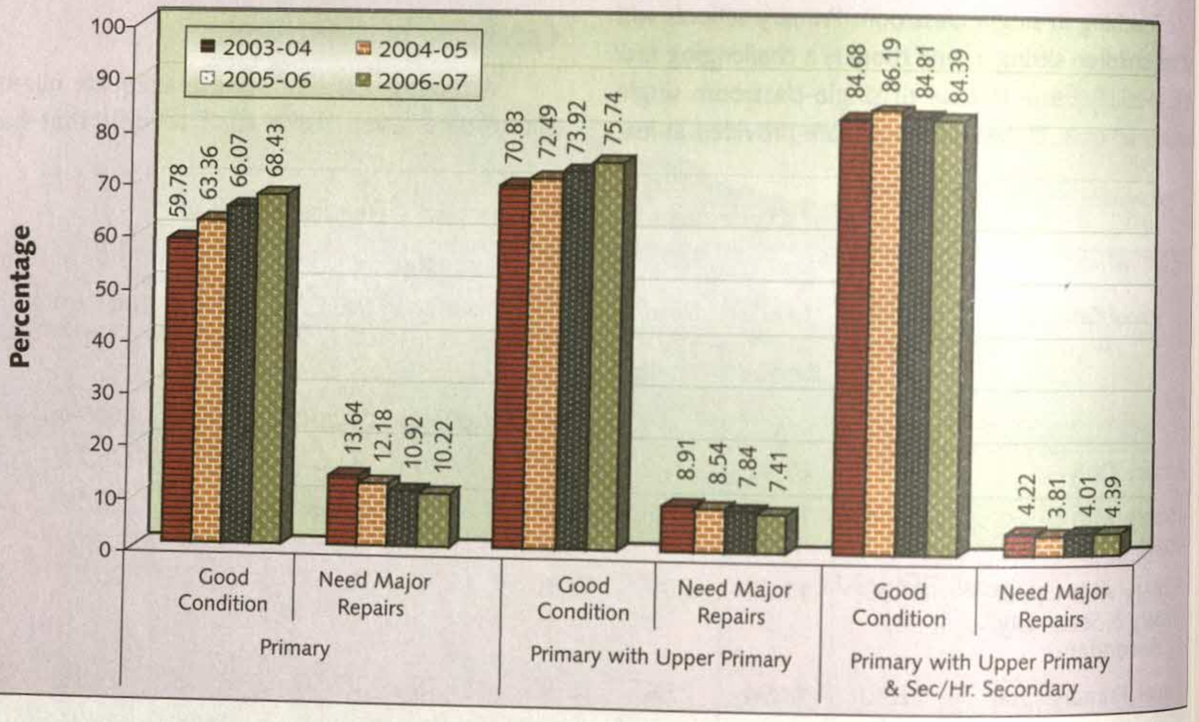
Table B13

Distribution of Classrooms by Condition and Category : 2006-07

School Category	Percentage								
	Good Condition	Need Minor Repairs	Need Major Repairs	Need Minor and Major Repairs (All Areas)			Need Minor and Major Repairs (Rural Areas)		
				2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
Primary Only	68.43	21.35	10.22	36.65	33.93	31.57	39.2	36.21	33.66
Primary with Upper Primary	75.74	16.85	7.41	27.51	26.08	24.26	31.04	29.59	27.78
Primary with Upper Primary & Secondary/ Hr. Secondary	84.39	11.22	4.39	13.80	15.19	15.61	20.91	20.87	22.05
Upper Primary Only	77.50	14.94	7.56	36.30	26.79	22.50	37.25	29.98	25.41
Upper Primary & Secondary/ Hr. Secondary	73.70	17.03	9.27	29.03	26.52	26.30	33.28	31.26	30.60
All Schools (2006-07)	**72.96**	**18.33**	**8.71**	–	–	**27.04**	–	–	**30.49**
All Schools (2005-06)	71.03	19.73	9.24	–	–		–	–	–
All Schools (2004-05)	68.48	21.13	10.39	–	–		–	–	–
All Schools (2003-04)	65.56	22.89	11.55	–	–		–	–	–
All Schools (2002-03)	63.48	24.73	11.80	–	–		–	–	–

or minor repairs; the percentage of such schools being 29 percent during the previous year. The percentage of schools that needed repairs is slightly higher in rural areas (30.49 percent) than the same in the urban areas (27.04 percent), which is true for all types of schools. It is also observed that the percentage of good condition classrooms has improved from 65.56 in 2003-04 to 71.03 in 2005-06 and further to 72.96 in 2006-07. Correspondingly, the percentage of schools that needed major and minor repairs (barring integrated Higher Secondary schools) declined marginally during the same period (Table B13). In the present year, as many as 18.33 percent (all types) schools need minor repairs and 8.71 percent schools require major repairs, that is, as many as 27.04 percent schools imparting elementary education need either major or minor repairs. The percentage of such schools during the previous year was 28.97. The provisions made under SSA may best be utilized in these schools.

Figure 2.16
Condition of Classrooms in Primary Schools : All States



> "The percentage of schools that needed repairs is slightly higher in rural areas than the same in the urban areas which is true for all types of schools"

Disaggregated analysis of DISE data would be helpful in identifying all such schools. It may also be observed that integrated Higher Secondary schools have the highest percentage (84.39) of good classrooms, followed by Upper Primary (77.50), independent Elementary (75.74) and Upper Primary attached to Higher Secondary (73.70) schools. On the other hand, Primary schools have the least percentage (68.43) of good classrooms and 21.35 percent classrooms needed minor repairs and 10.22 percent major repairs. Comparatively, the percentage of classrooms that needed major and minor repairs in other school types is lower than that in the case of the Primary schools (Table B 13).

More than 75 percent classrooms in Primary schools in Andhra Pradesh, Chandigarh, Delhi, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh, are of good condition as compared to only 25.95 percent classrooms in Nagaland and 25.01 percent in Meghalaya. Assam too has only 35.77 percent good condition classrooms in Primary schools. In Assam, as many as 34.36 percent classrooms in Primary schools needed minor and 36.20 percent major repairs. In Delhi, more than 15 percent of classrooms needed minor and major repairs. The majority of Primary school classrooms in the north-eastern region needed major and minor repairs as percentage of good condition classrooms in the region is comparatively low.

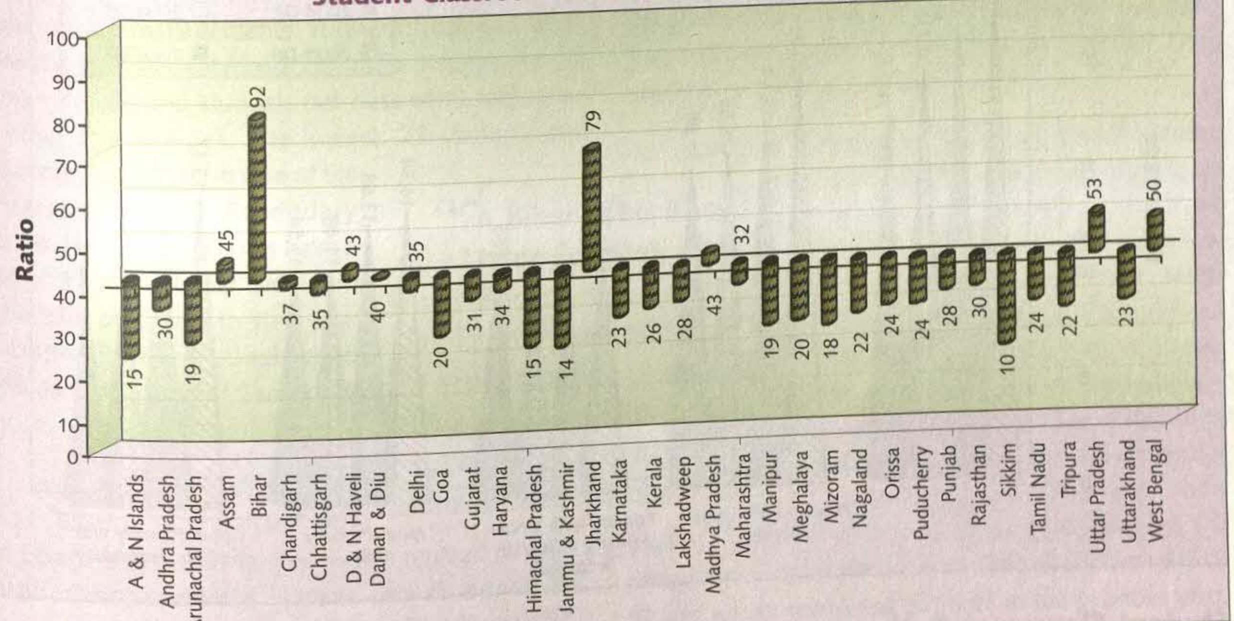
Table B14

Student-Classroom Ratio by Category : 2006-07

School Category	Students per Classroom				
	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
Primary Only	40	40	36	40	30
Primary with Upper Primary	37	38	36	41	30
Primary with Upper Primary & Secondary/ Hr. Secondary	29	28	29	30	26
Upper Primary Only	31	33	26	31	27
Upper Primary & Secondary /Hr. Secondary	30	31	27	27	30
All Schools (2006-07)	**36**	**37**	**33**	**38**	**29**
All Schools (2005-06)	39	40	35	40	29
All Schools (2004-05)	41	43	37	42	30
All Schools (2003-04)	42	43	37	43	32
All Schools (2002-03)	43	45	37	45	30

Figure 2.17

Student-Classroom Ratio in Primary Schools : 2006-07



Provisions available to schools on account of school repairs can be best utilized in the north-eastern states.

Figure 2.18
Student-Classroom Ratio in Primary Schools : All States

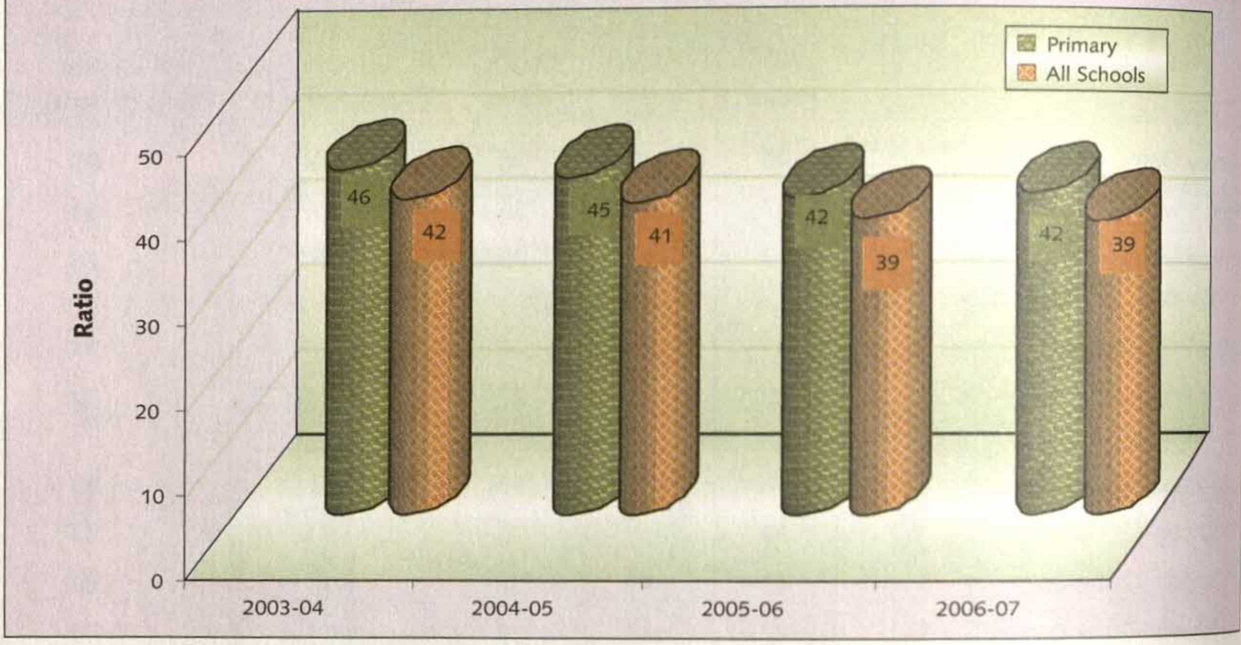
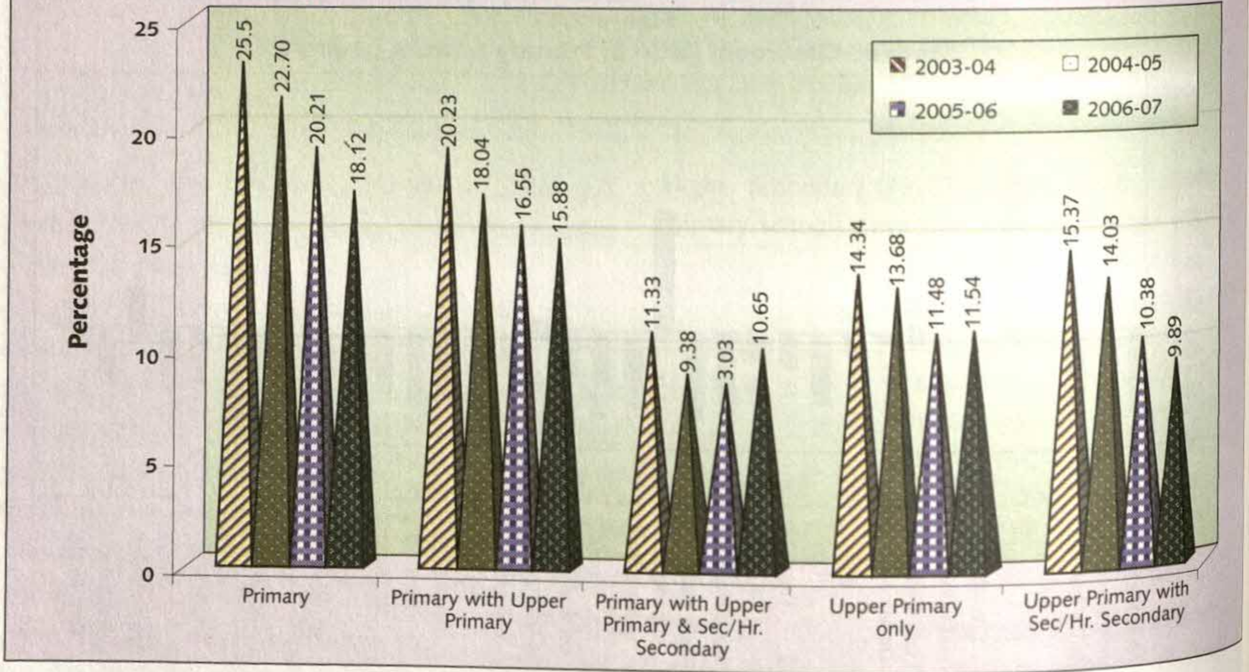


Figure 2.19
Percentage of Schools with Student-Classroom Ratio above 60 : All States

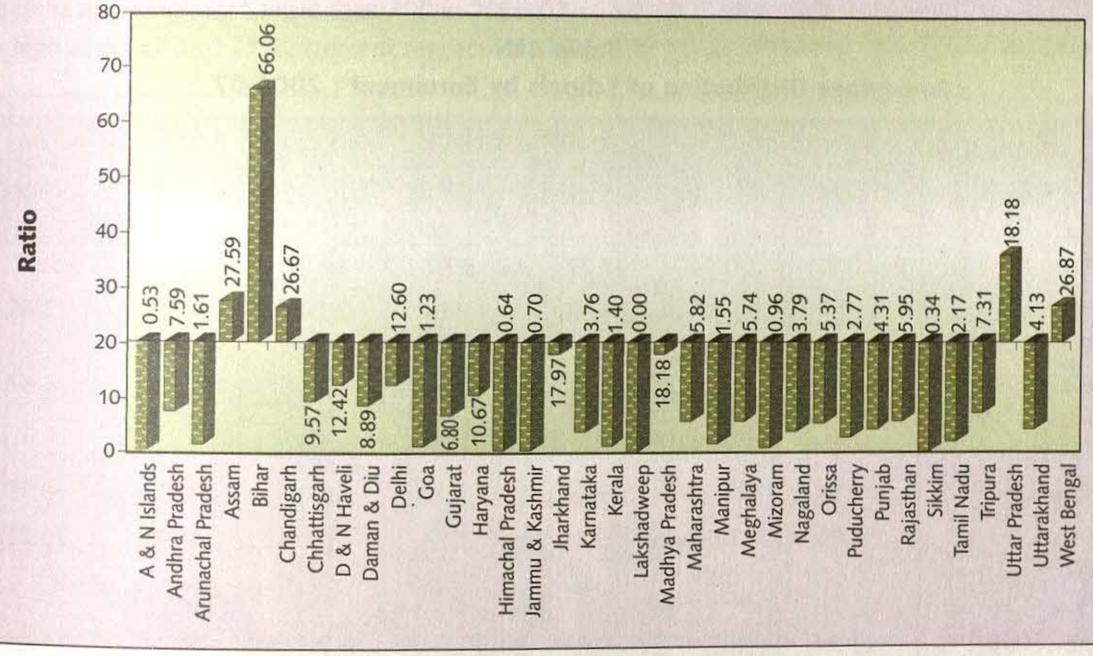


Student-Classroom Ratio

Besides, average number of classrooms and condition of classrooms, Student-Classroom Ratio (SCR) is also analysed both at the all-India and state leve Student-classroom ratio presents average number pupils sitting in one classroom. The DISE data reveal that in a few states, student-classroom ratio is high whic is true for both rural and urban areas. However, schoo located in rural areas have comparatively a high rati than the schools in urban areas. Irrespective of school type, SCR presented in Table B14 shows improvement. All schools together have an average of 36 (compared to 39 in 2005-06) students per classroom (rural 37 and urban 33 students per classroom). Government schools have a classroom ratio of 38 against 29 in case of schools under private managements. Further, it has also been observed that student-classroom ratio is higher in the Primary schools (40 students per classroom) compared to other school types. The lowest, 29 students per classroom, is observed in case of the integrated Higher Secondary schools. Elementary schools have a ratio of 37 students per classroom (Table B14) compared to 30 in case of Upper Primary attached to Secondary and Higher Secondary schools.

Figure 2.20

Percentage of Primary Schools with Student-Classroom Ratio above 60 : 2006-07



> "In Bihar, Jharkhand, Uttar Pradesh and West Bengal, the percentage of Primary schools having 60 students per classroom is much higher compared to other states, and hence need immediate interventions"

In case of Primary schools, the ratio in Bihar (92), Jharkhand (79) and Uttar Pradesh (53) is very high compared to other states. Comparatively, Assam (45 students per classroom), Madhya Pradesh (43), and West Bengal (50), too have a high ratio. These states should look into the matter without delay, otherwise, it would be difficult to retain children in the school and may also be difficult for teacher to handle all the children. Himachal Pradesh (with 15 students per classroom) and Jammu & Kashmir (with 14 students per classroom) and all the states from the north-eastern region have comfortable student-classroom ratio. The ratio is as low as 10 students per classroom in case of Sikkim compared to 20 in Meghalaya, 18 in Mizoram, 22 in Nagaland and Tripura. The national capital of Delhi has an average of 35 students in a Primary school classroom.

Average SCR presented above gives average number of students per classroom which has shown consistent improvement over the past few years. Despite comfortable ratio, there may still be a few schools where large number of students sit in one classroom. To know more about such schools, the percentage distribution of schools having student-classroom ratio above 60 have also been analysed which reveals that about 16.45 percent (all categories) schools have the student-classroom ratio of 60 and above compared to 18.37 in the previous year. Barring Upper Primary attached to Secondary and Higher Secondary schools, the percentage of such schools is much higher in case of other school types. The percentage of such Primary schools is higher than that of all categories of schools. It may also be noted that in a few states, such as Bihar (68.51 percent), Jharkhand (24.69 percent), Uttar Pradesh (35.82 percent) and West Bengal (26.47 percent), the percentage of Primary schools having 60 students per classroom is much higher compared to other states, and hence need immediate interventions.

Distribution of Schools by Enrolment & Enrolment Size

Despite availability of schools and school-related facilities, still there is no guarantee that adequate number of children is enrolled in schools. To judge that, a variety of indicators presenting information about the size of school is analysed. One such indicator is distribution of schools by enrolment size in different slabs. It reveals that more than 48 percent schools (all categories) have enrolment up to 100. In rural areas, the percentage of such schools is 50.96. However, urban areas have only 30.08 percent schools that have enrolment up to 100. There are about 7.91 percent (94,4661 schools) and 16.01 percent schools (1,91,628) which respectively have enrolment between 1-25 and 26-50. On the other hand, about 24.44 percent schools (37,076) in urban areas have enrolment even more than 300 compared to 9.14 percent (95,327) schools in the rural areas (Table B15).

Table B15
Percentage Distribution of Schools by Enrolment : 2006-07

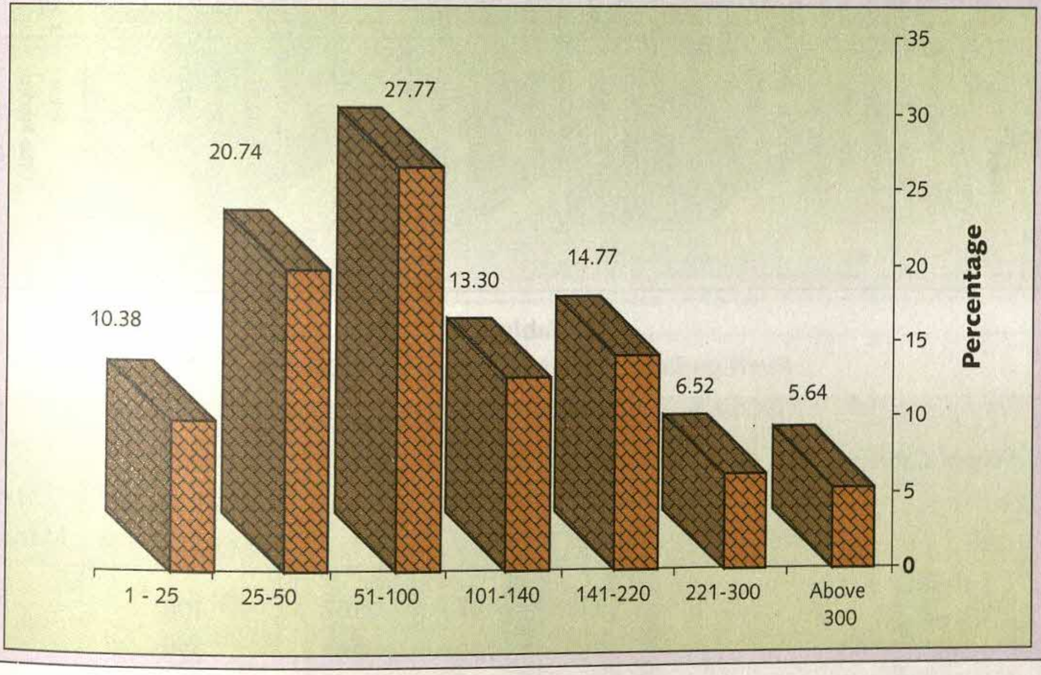
School Category	Enrolment Slabs						
	1-25	26-50	51-100	101-140	141-220	221-300	>300
Primary Only	10.38	20.74	27.77	13.30	14.77	6.52	5.64
Primary with Upper Primary	1.39	3.97	14.33	14.36	25.48	16.20	23.66
Primary with Upper Primary & Secondary/ Hr. Secondary	2.04	4.31	10.44	9.77	19.34	15.30	36.67
Upper Primary Only	7.56	13.89	28.49	15.56	16.07	7.02	10.18
Upper Primary & Secondary/Hr. Secondary	2.89	7.68	15.76	13.79	21.00	11.34	25.22
All Schools, 2006-07	**7.91**	**16.01**	**24.35**	**13.62**	**17.22**	**8.74**	**11.08**
All Schools, 2005-06	6.17	15.20	24.25	13.81	17.62	9.02	11.01
All Schools, 2004-05	5.80	14.95	23.62	13.85	18.13	9.24	11.23
All Schools, 2003-04	5.23	13.74	23.42	14.52	18.48	9.49	11.47
All Schools, 2002-03	5.15	13.58	24.16	14.94	18.57	9.31	10.73

Note: Totals may not add to hundred because of missing values and rounding of figures. The percentages are calculated with regard to total schools in a category.

About 58.86 percent of the total Primary schools in 2006-07 (55.26 percent in 2005-06) have enrolment up to 100 compared to 60.57 percent Primary schools in rural areas (58.01 percent in 2005-06). The percentage of such schools in urban areas is only 42.30 (38.22 in 2005-06). Further, it is observed that about 10.38 percent (8.18 percent in 2005-06) Primary schools have an average enrolment of 25 and another 20.74 percent (19.94 percent in 2005-06) between 26 to 50. About 13.30 percent (13.91 percent in 2005-06) Primary schools have enrolment between 101 to 140. On the other hand, about 80 percent Elementary schools have enrolment of more than 100. It may also be noted that 1.39 percent integrated Higher Secondary schools have an average enrolment of 25 and another 3.97 percent schools have enrolment between 26 to 50. While about 21 percent Upper Primary schools have enrolment up to 50, 5.64 percent Primary schools have enrolment more than 300 compared to 23.66 percent Elementary schools. The percentage of schools having enrolment more than 300 in 2006-07 is as high as 36.67 and 25.22 percent respectively in case of the integrated Higher Secondary and Upper Primary attached to Higher Secondary schools. Almost similar trend is observed in case of schools located in rural areas.

Figure 2.21

Percentage Distribution of Primary Schools by Enrolment : 2006-07, All States



"About 58.86 percent of the total Primary schools in 2006-07 have enrolment up to 100 compared to 60.57 percent Primary schools in rural areas. The percentage of such schools in urban areas is only 42.30"

The state-specific distribution of schools having enrolment below 25 reveals that the percentage of such Primary schools in the states of Arunachal Pradesh (45.98), Goa (42.28), Himachal Pradesh (27.48), Jammu & Kashmir (39.44), Karnataka (26.69), Meghalaya (29.14) and Sikkim (32.39) is above 25 percent. In a few other states also, a good number of Primary schools have enrolment below 25. More than half of Primary schools in such states have an enrolment size up to 50. For example, the percentage of such schools in Jammu & Kashmir is as high as 80.79 against 64.19 percent in Himachal Pradesh. On the other hand, there are only a few such schools in Bihar (3.45 percent). This is also reflected in student-classroom ratio presented above which is very high compared to other states. The percentage of such schools in Delhi and Uttar Pradesh is also low, these respectively being at 4.42 and 4.21. In Mizoram, even 16.18 percent integrated Higher Secondary schools have enrolment below 50. Uttarakhand has 9.53 percent and Himachal Pradesh 7.23 percent such schools. About 51 percent Upper Primary schools in Himachal Pradesh, 50 percent in Sikkim, 33 percent in Mizoram and 42 percent in Uttarakhand have enrolment below 50. Analysis of all schools together reveals that about 59 percent schools in Meghalaya, 61 percent in Arunachal Pradesh, 53 percent in Himachal Pradesh and 44 percent in Uttarakhand have enrolment below 50. Kerala has 7.07 percent such schools compared to 7.55 percent in Uttar Pradesh and 2.47 percent in Delhi. Percentage of smaller schools in rural areas in many states is even higher than that reported above.

Figure 2.22
Percentage of Primary Schools with ≤ 50 Students : 2006-07

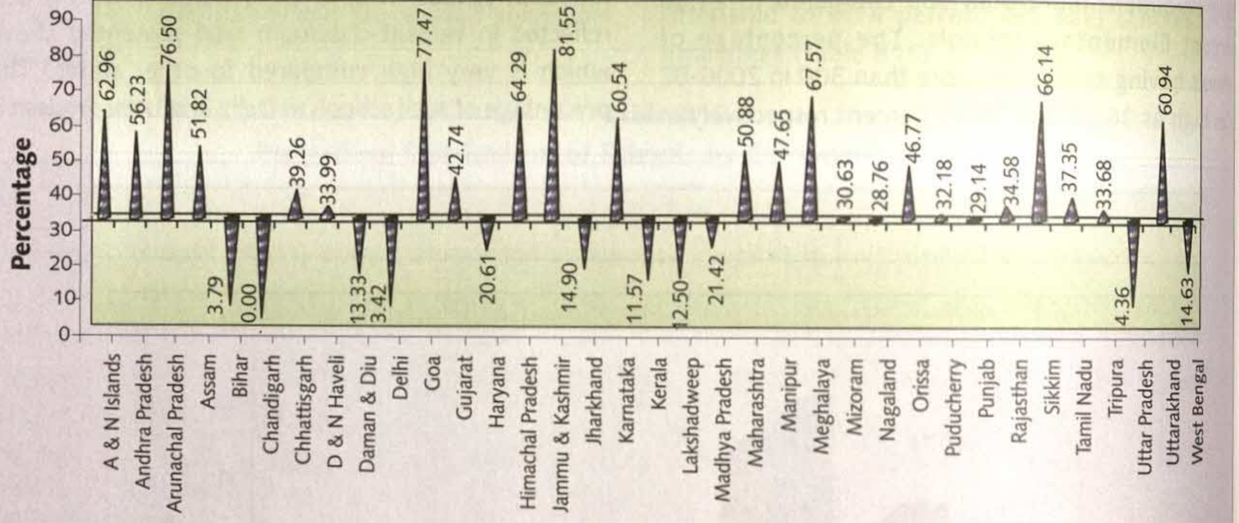


Table B16
Average Enrolment by Category : 2006-07

School Category	Enrolment				
	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
Primary Only	113	107	167	108	155
Primary with Upper Primary	235	222	287	229	249
Primary with Upper Primary & Secondary/ Hr. Secondary	313	261	393	288	329
Upper Primary Only	146	133	259	122	223
Upper Primary & Secondary/ Hr. Secondary	250	231	308	202	304
All Schools(2006-07)	**150**	**137**	**239**	**133**	**222**
All Schools (2005-06)	150	138	237	135	225
All Schools (2004-05)	150	140	239	137	223
All Schools (2003-04)	154	143	250	140	245
All Schools (2002-03)	150	142	239	138	239

In addition to distribution of schools in different enrolment slabs, average size of school in different categories has also been analysed which reveals not much change over the previous year. All schools together have an average enrolment of 150 which is exactly the same as was in the previous year. Schools located in urban areas have higher average of 239 compared to only 137 in rural areas which is also true for all other school types (Table B16). Private schools have higher average enrolment (222) than the government schools (133) which is quite similar to all other school types. Further, it is observed that the average size of a Primary school is 113, the corresponding figure in rural areas is 107 and

Figure 2.23
Percentage of Primary Schools with ≤ 50 Students : All States

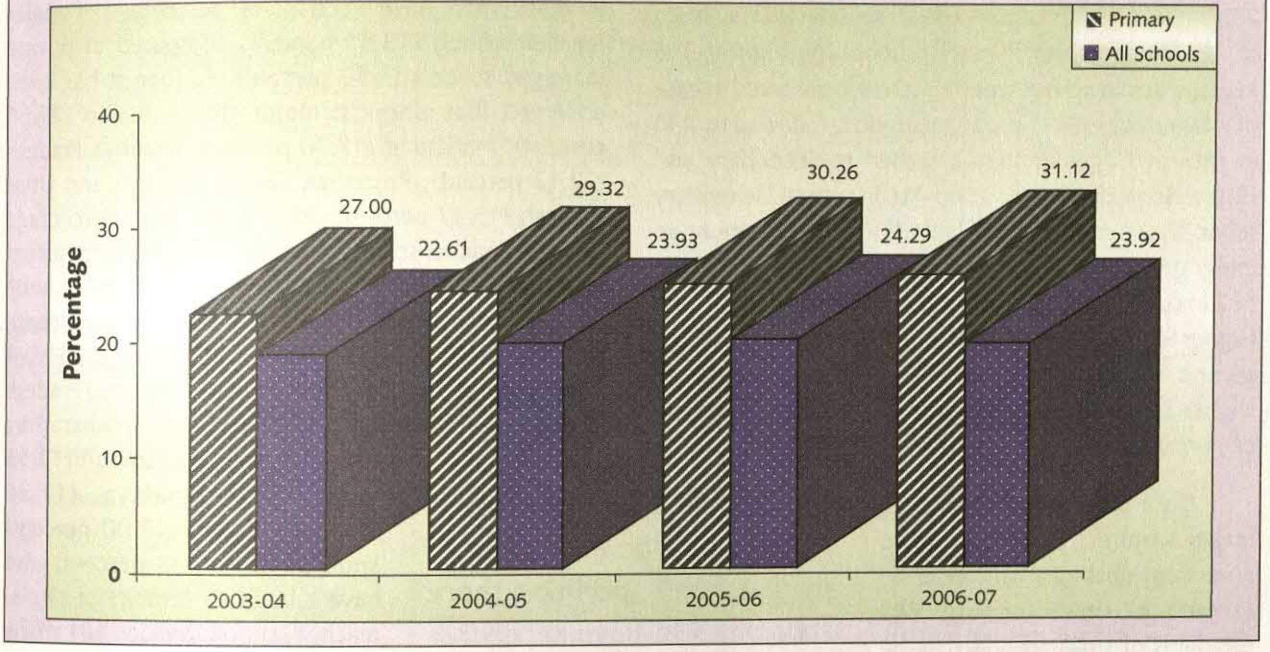
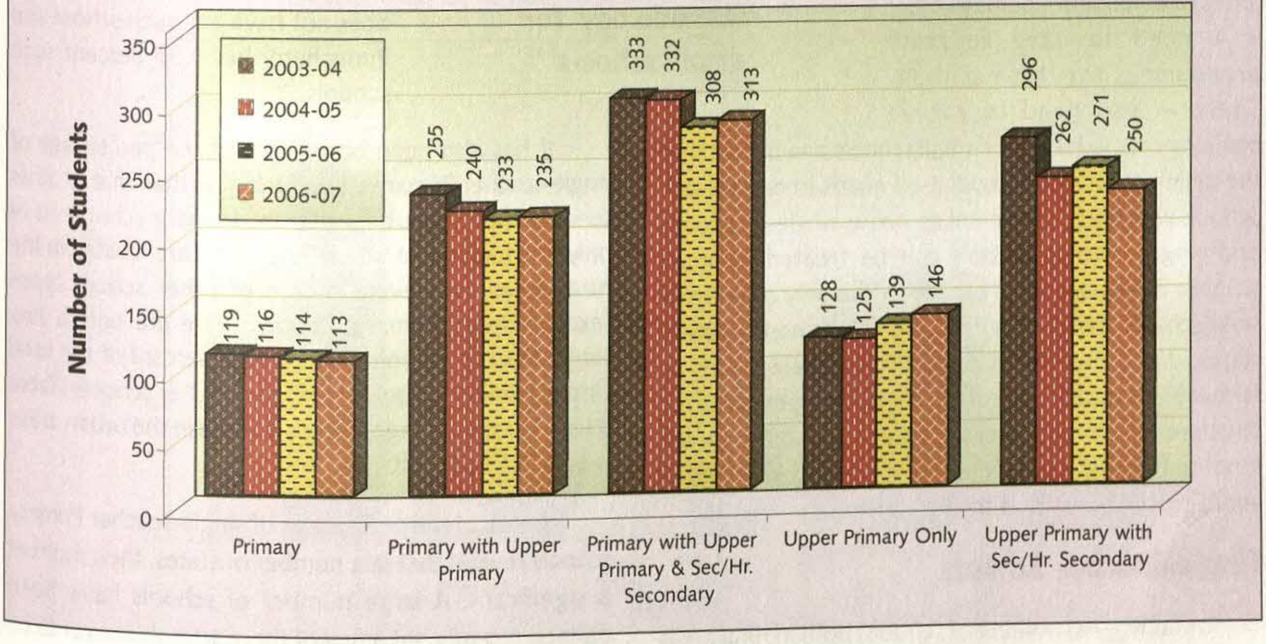


Figure 2.24
Average Enrolment in Schools : All States



in urban areas 167. The north-eastern region sates have low enrolment (all schools). It varies from 58 in Meghalaya to 81 in Arunachal Pradesh and 190 in Tripura. The highest average enrolment of 468 in Primary schools is observed in Chandigarh, followed by 404 in Delhi, 208 in Bihar, 197 in Uttar Pradesh. Kerala has an average of 160 students per Primary school. The highest 556 average across school types in Kerala is observed in case of integrated Higher Secondary schools, followed by 440 in case of Upper Primary attached to Secondary and Higher Secondary schools and 416 in case of Elementary schools. It is interesting to note that average size of an integrated Higher Secondary school in Delhi is 722 and 582 in case of Upper Primary attached to Secondary and Higher Secondary schools. Across school types, Delhi has second highest average of 722 in case of integrated Higher Secondary and Mizoram the lowest 170 in case of Primary schools.

Data clearly reveals that a large number of schools have enrolment up to 25 which can be termed as small schools. The problems of small schools may be different than those of the large schools. In view of there being a large number of small schools (in terms of enrolment), perhaps there is a need to have separate programmes for these schools. There is also need to evolve planning methodology for small schools and before that the definition of small school itself needs to be evolved. Schools with fewer enrolment as well as single-classroom and single-teacher schools can be treated as small schools. Enrolment alone cannot be the only criterion of small schools. If that is the case, then all the north-eastern states, and a number of other smaller states, such as Himachal Pradesh because of their demographic structure, would fall under the category of having small schools. DISE data can be further probed to know more about small schools and their problems.

> "In view of there being a large number of small schools, perhaps there is a need to have separate programmes for these schools. There is also need to evolve planning methodology for small schools"

Single-Teacher Schools

A fairly good number of schools, both in rural areas (11.76 percent in 2006-07 against 13.35 percent in 2005-06) and urban areas (5.22 percent in 2006-07 against 4.23 percent in 2005-06), had only one teacher (Table B17). Of the total single-teacher schools (al categories), 94.35 percent are located in the rural areas. Urban areas have only a few such schools. All areas together have about 11.76 percent single-teacher schools (12.17 percent in 2005-06). Schools managed by government have much higher percentage of single-teacher schools (13.61 percent) compared to private managed schools (3.10 percent). Further, it has been observed that amongst major states, Assam (29.50 percent), Jharkhand (17.30 percent), Madhya Pradesh (22.12 percent), Rajasthan (26.08 percent) and Uttar Pradesh (15.47 percent), have a very high percentage of single-teacher schools. Practically, every fourth school in Rajasthan and Assam is a single-teacher school. Andhra Pradesh (7.81 percent), Bihar (5.12 percent), Chhattisgarh (13.12 percent), Dadra & Nagar Haveli (28.99 percent), Goa (25.56 percent), Himachal Pradesh (7.30 percent), Karnataka (12.63 percent), Maharashtra (5.21 percent), Manipur (12.15 percent), Meghalaya (11.56 percent), Orissa (12.00 percent) and Punjab (10.83 percent) also have a large percentage of single-teacher schools. Incidentally, many of these states are DPEP states. In the capital city of Delhi, only 0.19 percent schools (all categories) are single-teacher schools. Chandigarh does not have any such school and Puducherry has 1.35 percent such schools.

It has also been observed that the percentage of single-teacher Primary schools is higher than that of other school types. About 16 percent Primary schools have only one teacher, of which 95 percent are located in the rural areas. However, in case of other school types (except Upper Primary schools) there are only a few single-teacher schools. About 9.56 percent of the total Upper Primary schools are single-teacher schools (Table B17). The percentage of such schools in the urban areas is only 2.15 percent.

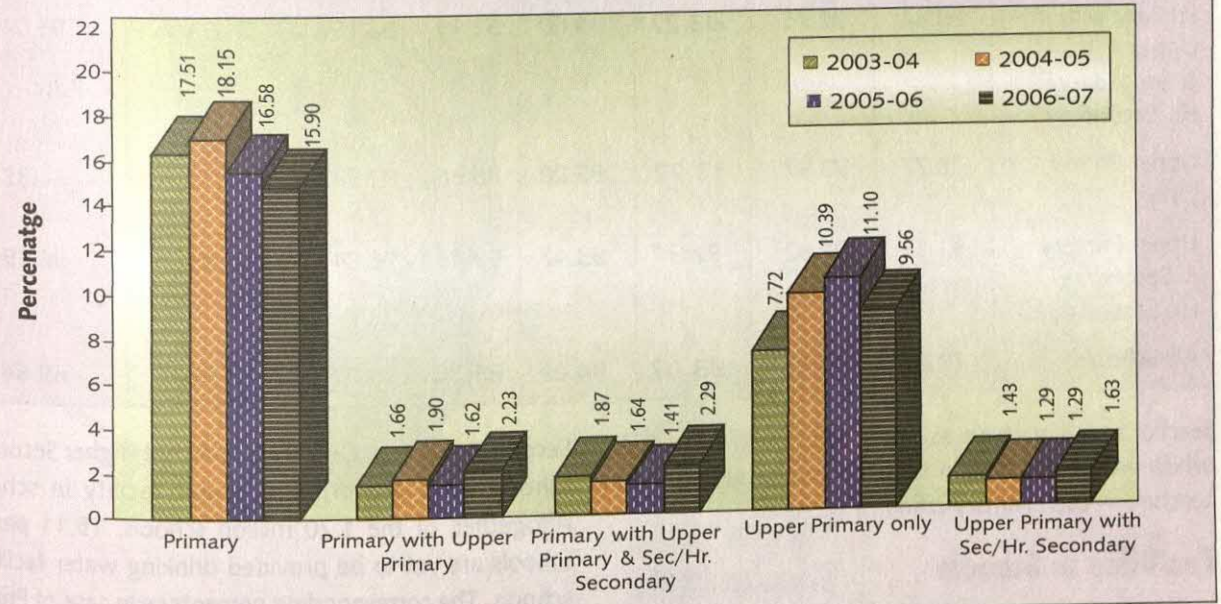
A look at the percentage of single-teacher Primary schools reveals that in a number of states, their number is significant. A large number of schools have been opened recently but a few of these schools are yet to be provided adequate number of teachers. Chandigarh and Lakshadweep have reported no single-teacher Primary school and Kerala and Delhi respectively had only 31 and 9 such schools in 2006-07. Similarly, Andaman & Nicobar Islands, Daman & Diu, Puducherry, Sikkim, and Tripura, have a few or no such schools. The percentage of single-teacher Primary schools is as high as 61.67 in Arunachal Pradesh and 42.59 in Rajasthan, followed by Assam with a percentage of 37.40, Madhya Pradesh 27.55, Jharkhand 22.48, Karnataka 22.04, Uttarakhand 19.17 and Andhra Pradesh 11.71. On the other hand, the percentage of such schools in Bihar (6.79) and Uttar Pradesh (2.21) is comparatively low but in view of the

Table B17
Percentage of Single-Teacher Schools by Category : 2006-07

School Category	Percentage				
	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
Primary Only	15.90	16.60	8.96	17.05	5.37
Primary with Upper Primary	2.23	2.23	2.25	2.30	2.07
Primary with Upper Primary & Secondary/Hr. Secondary	2.29	2.79	1.52	3.63	1.48
Upper Primary Only	9.56	10.42	2.15	12.06	1.49
Upper Primary & Secondary/Hr. Secondary	1.63	1.81	1.06	2.30	0.86
All Schools (2006-07)	**11.76**	**12.74**	**5.22**	**13.61**	**3.10**
All Schools (2005-06)	12.17	13.35	4.23	14.13	2.87
All Schools (2004-05)	13.36	14.66	4.41	15.13	3.45
All Schools (2003-04)	12.93	14.19	4.55	14.42	3.41
All Schools (2002-03)	14.40	15.72	5.28	15.87	3.31

Note: Totals may not add to hundred because of missing values and rounding of figures.

Figure 2.25
Percentage of Single-Teacher Schools by School Category



large number of schools in these states, in absolute terms they may be having higher number of single-teacher Primary schools than in other states. Few states from the north-eastern region have a low percentage of single-teacher Primary schools but other smaller states, such as Dadra & Nagar Haveli (50.33 percent), and Goa (36.63 percent), have sizable number of such schools. West Bengal too has 3.17 percent (6.07 percent in 2005-06) single-teacher schools.

Despite decline in the single-teacher schools over a period of time, there number is still high. Rationalization of teachers across states may help improve number of teachers in single-teacher schools which is also reflected in average number of teachers per school which is found to be well above 2. This should be supported by filling-up of all the existing vacant teachers' position across the country. Like additional classrooms, a large number of teacher's positions have also been sanctioned under SSA which would also help in further ensuring at least two teachers in each Primary school.

Facilities in Schools

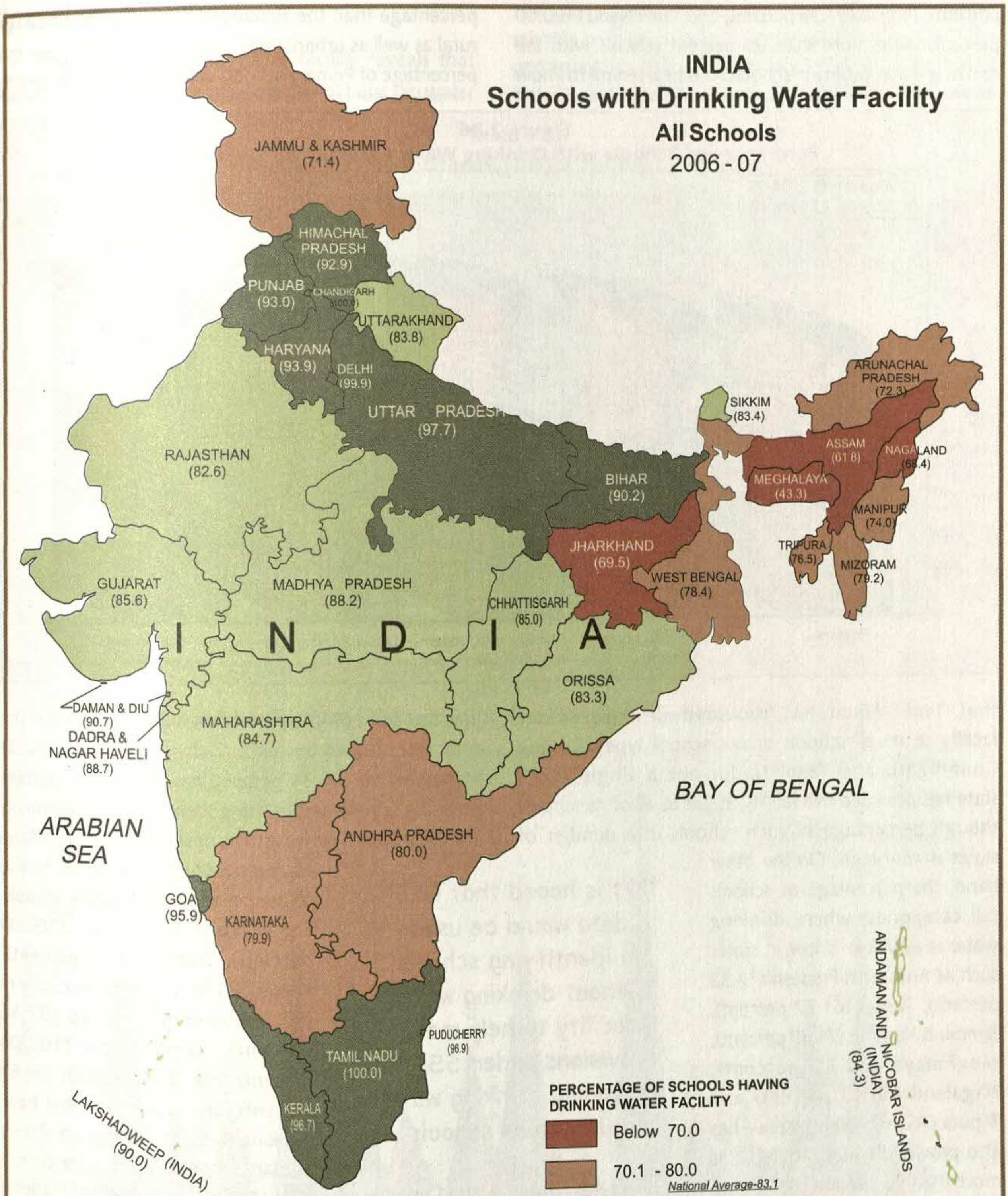
Drinking Water Facility

Availability of drinking water in the school is the most essential facility that every school should have. DISE data reveals that more schools in 2006-07 had drinking water facility than in 2005-06. The distribution of schools, however, further shows that this basic facility is not yet made available in all the schools that reported DISE data in 2006-07. About 85 percent schools (all categories) are having drinking water facility available as in 2006-07, compared to 83.07 percent in the previous year. A significant difference is noticed in the number of such schools located in rural (84.28 percent in 2006-07 and 82.59 percent in 2005-06) and urban areas (90.07 percent in 2006-07 and 89.26 percent in 2005-06). As compared to 81.46 percent (83.93 percent in 2005-06) schools under government managements, about 90 percent schools under private managements had drinking water facilities in schools. In none of the school type, drinking water facility is available in all schools. This facility is not yet available even in all the integrated Higher Secondary schools. Only 93.60 percent Higher Secondary schools have got drinking water facility in schools. Altogether, of the 1.20 million schools, 15.11 percent schools are yet to be provided drinking water facility in schools. The corresponding percentage in case of Primary schools is about 18 percent.

Table B18
Schools Having Drinking Water Facility in School : 2006-07

School Category	Percentage							
	All Areas				Rural Areas	Urban Areas	All Government Managements	All Private Managements
	2003-04	2004-05	2005-06	2006-07				
Primary Only	76.24	78.80	81.12	82.37	82.14	84.72	82.19	84.31
Primary with Upper Primary	83.89	86.68	82.78	89.95	88.85	94.48	87.84	95.43
Primary with Upper Primary & Secondary/ Hr. Secondary	90.44	92.75	93.22	93.60	92.19	96.10	91.31	95.04
Upper Primary Only	78.77	79.87	83.22	87.00	86.36	92.54	87.21	86.33
Upper Primary & Secondary/ Hr. Secondary	91.33	91.82	92.31	93.47	92.43	96.84	90.93	96.39
All Schools	**77.89**	**80.60**	**83.07**	**84.89**	**84.28**	**90.07**	**83.93**	**89.64**

Nonetheless, it is observed that Chandigarh (100.00 percent), Delhi (99.94 percent), Puducherry (96.86

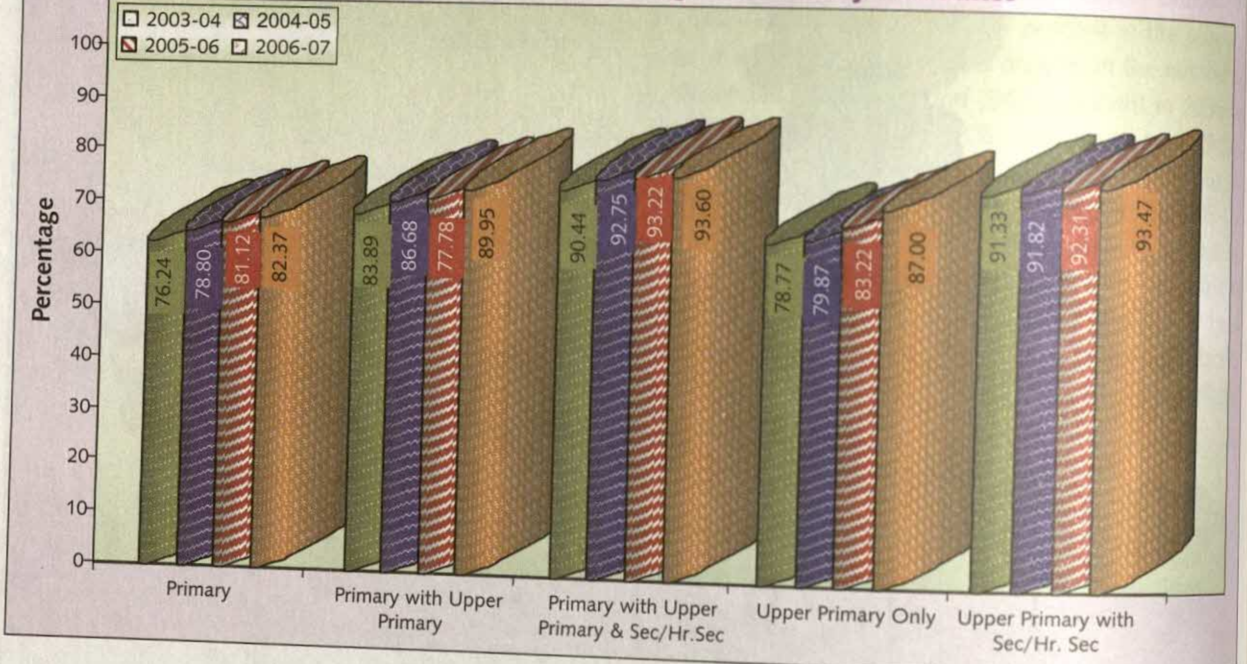

INDIA
Schools with Drinking Water Facility
All Schools
2006 - 07
JAMMU & KASHMIR (71.4)
HIMACHAL PRADESH (92.9)
PUNJAB (93.0)
CHANDIGARH (100.0)
UTTARAKHAND (83.8)
HARYANA (93.9)
DELHI (99.9)
UTTAR PRADESH (97.7)
RAJASTHAN (82.6)
BIHAR (90.2)
SIKKIM (83.4)
ARUNACHAL PRADESH (72.3)
ASSAM (61.8)
NAGALAND (68.4)
MEGHALAYA (43.3)
MANIPUR (74.0)
TRIPURA (76.5)
MIZORAM (79.2)
JHARKHAND (69.5)
WEST BENGAL (78.4)
GUJARAT (85.6)
MADHYA PRADESH (88.2)
CHHATTISGARH (85.0)
I N D I A
ORISSA (83.3)
DAMAN & DIU (90.7)
DADRA & NAGAR HAVELI (88.7)
MAHARASHTRA (84.7)
BAY OF BENGAL
ARABIAN SEA
ANDHRA PRADESH (80.0)
GOA (95.9)
KARNATAKA (79.9)
PUDUCHERRY (96.9)
TAMIL NADU (100.0)
KERALA (96.7)
LAKSHADWEEP (INDIA) (90.0)
ANDAMAN AND NICOBAR ISLANDS (INDIA) (84.3)
(Indira Point)
PERCENTAGE OF SCHOOLS HAVING DRINKING WATER FACILITY
Below 70.0
70.1 - 80.0
National Average-83.1
80.1 - 90.0
Above 90.0
Note: Map not to scale

Map 2.4

percent), Punjab (97.98 percent) and Tamil Nadu (100.00 percent) have more than 95 percent schools with the drinking water facility in schools. It is heartening to know that Tamil Nadu has provided drinking water facility to its all schools across school types. Barring Chandigarh and Tamil Nadu, not a single other state has provided this facility as yet to all of its schools though percentage of such schools in a number of states is very high. On the other hand, the percentage of schools (all categories) where drinking water is available is low in states such as Arunachal Pradesh (72.33 percent), Assam (61.77 percent), Jammu & Kashmir (71.39 percent), Meghalaya (43.31 percent), Nagaland (68.43 percent) and Tripura (76.46 percent). Kerala has also provided water facility to its more than 96 percent schools (all categories) compared to 80 percent such schools in Karnataka.

Figure 2.26

Percentage of Schools with Drinking Water Facility : All States



"It is hoped that DISE data would be used in identifying schools without drinking water facility to help make provisions under SSA in extending drinking water facility to all schools"

Table B18 reveals that 82.37 percent Primary schools have drinking water facility in school, compared to 89.95 percent Primary with Upper Primary schools. All other types of schools having this facility have higher percentage than the Primary schools, which is true for rural as well as urban areas. Like other school types, the percentage of Primary schools with drinking water facility in urban areas (84.72 percent) is higher than that in the rural areas (82.14 percent). Such schools under private managements (84.31 percent) have higher percentage than the schools under the government managements (82.19 percent). However, it is observed that many states have provided drinking water facility to almost all of the Primary schools. For instance, Chandigarh (100.00 percent), Delhi (99.96 percent), Kerala (95.91 percent), Puducherry (97.23 percent), Punjab (97.56 percent), Tamil Nadu (100.00 percent) and Uttar Pradesh (98.61 percent), are such states that have drinking water facility in most of their Primary schools. At the same time, a good number of Primary schools in Arunachal Pradesh, Jammu & Kashmir and north-eastern states are yet to be provided with drinking water facility in school. It is hoped that DISE data would be used in identifying schools without drinking water facility to help make provisions under the SSA in extending drinking water facility to all schools.

Type of Drinking Water

The type of drinking water facility reveals that majority of schools (all categories) do not have tap water facility in their premises. Much difference is noticed in this regard in schools located in rural (18.84 percent) and urban areas (51.10 percent). Only 22.82 percent schools had tap water in the school in 2006-07. The percentage of rural area schools that had hand-pump installed in the school was 52.74, while this figure in the urban areas was 25.85 percent. Interestingly, about 5.55 percent schools had a well in the school premises with

Table B19

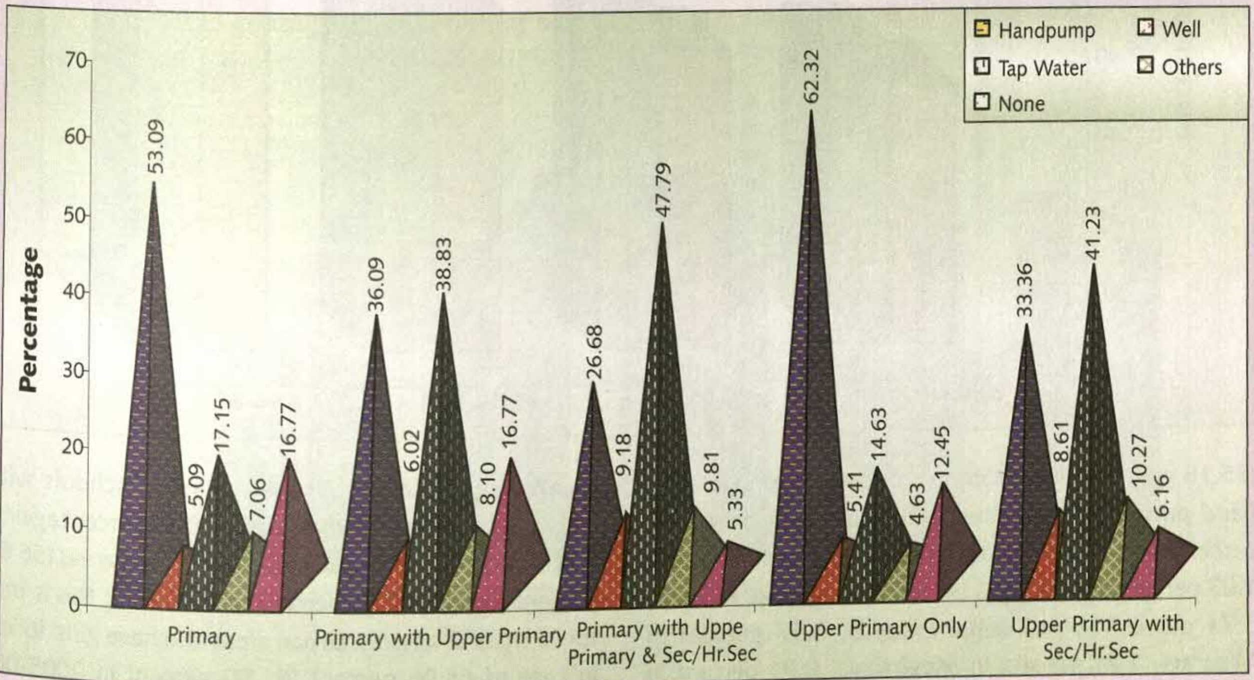
Schools by Type of Drinking Water Facility : 2006-07

Type of Drinking Water Facility	Percentage					
	All Areas				Rural Areas	Urban Areas
	2003-04	2004-05	2005-06	2006-07		
Hand-Pump	46.69	46.85	49.12	49.25	52.74	25.85
Well	5.57	5.43	5.63	5.55	5.49	6.01
Tap Water	18.93	21.46	22.97	22.82	18.84	51.10
Others	6.70	6.84	5.87	7.26	7.31	7.05
None	16.99	15.60	14.87	14.23	15.06	8.68
No Responses	5.12	3.79	1.55	0.90	0.66	1.32

Note: Total may not add to hundred because of no-responses and rounding of figures.

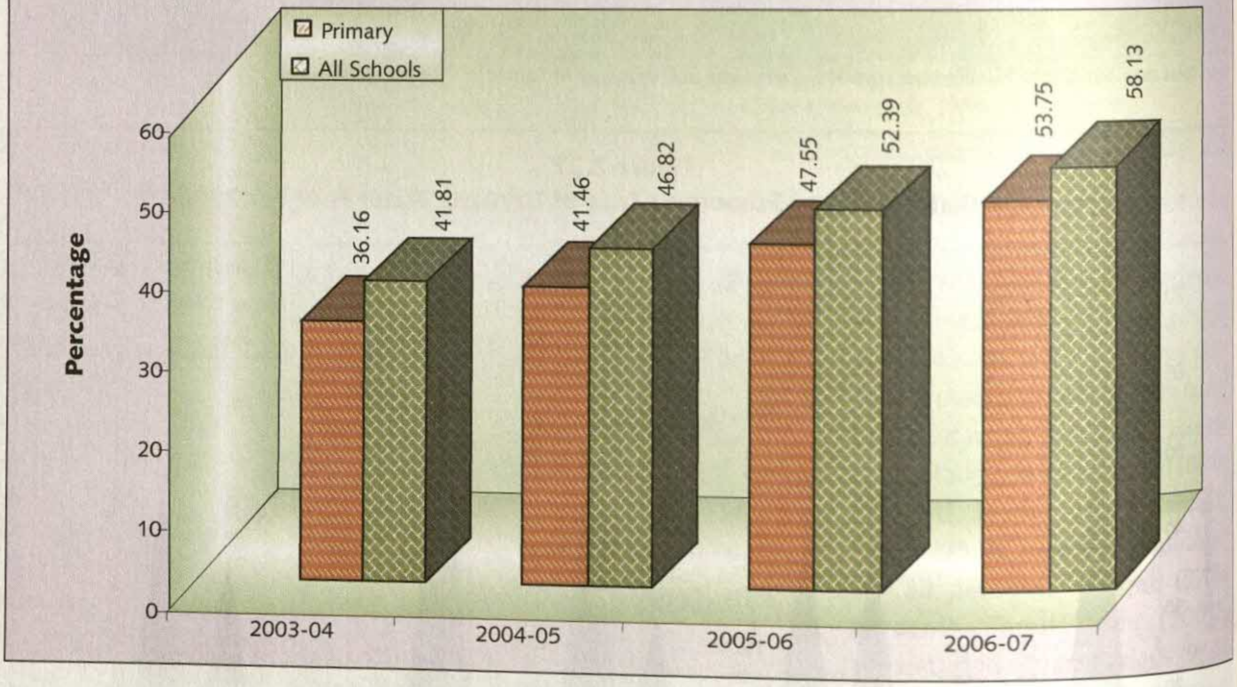
Figure 2.27

Percentage Distribution of Schools by Type of Drinking Water Facility : 2006-07



not much difference in rural (5.49 percent) and urban (6.01 percent) areas. Almost an equal percentage of schools had other arrangement of drinking water than specified above (Table B19). It is observed that all integrated Higher Secondary schools do not have tap water facility. The percentage of Elementary schools with tap water is 38.83 percent compared to only 14.63 percent such independent Upper Primary schools. On the other hand, a good number of independent Elementary schools (36.99 percent) draw water from hand-pump. In case of independent Upper Primary schools, the percentage of such schools is as high as 62.32. Amongst the major states, Uttar Pradesh (95.74 percent), Chhattisgarh (77.16 percent), Jharkhand (40.48 percent), Madhya Pradesh (69.85 percent) and Bihar (85.15 percent), had majority of Primary schools with hand-pump facility in the school, whereas only 5.05 percent Primary schools in Delhi, 3.39 percent in Kerala, 1.03 percent in Goa, 3.20 percent in Himachal Pradesh, 5.71 percent in Arunachal Pradesh, 0.57 percent in Mizoram, 2.71 percent in Meghalaya, 0.91 percent in Sikkim and 5.16 percent in Nagaland had such a facility. Comparatively, the percentage of tap water in north-eastern states is much higher than the same in other states.

Figure 2.28
Percentage Distribution of Schools Having Common Toilet in School



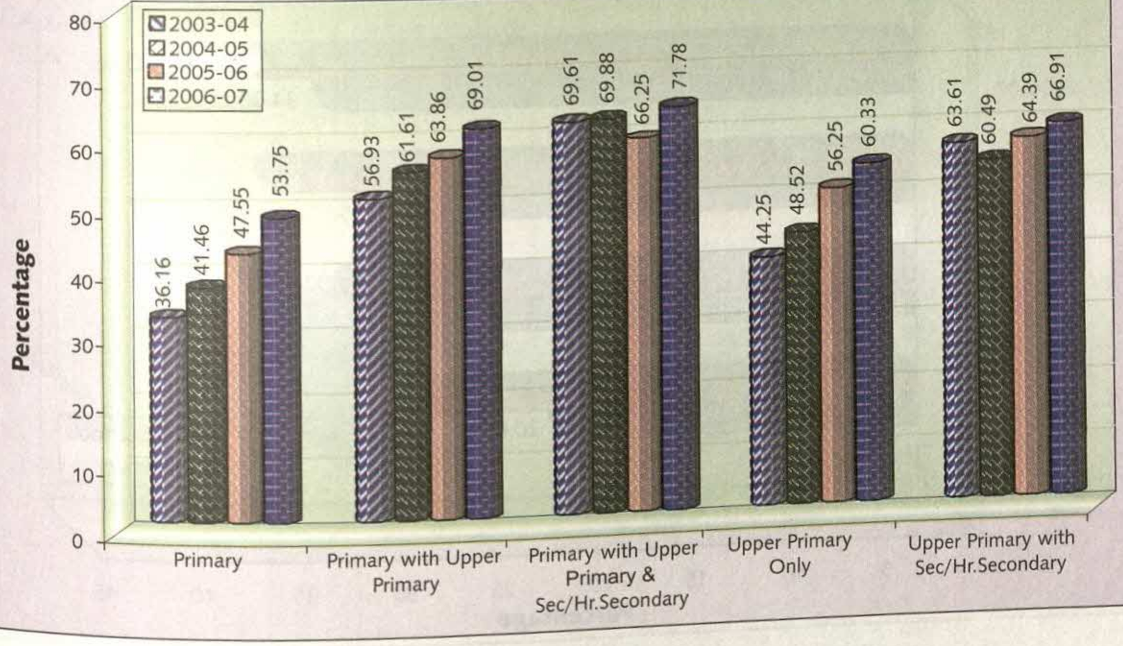
Common and Separate Toilets for Girls

Like drinking water facilities, toilet facilities in schools have also improved impressively since the inception of SSA. Data reveals that providing facilities to schools got further momentum in 2006-07 (Table B20). Percentage of schools with common toilets and separate toilets for girls increased in 2006-07 over 2005-06, irrespective of the school types (except integrated Higher Secondary schools) and location (rural or urban). Put together, about 58 percent schools (all categories) across 609 districts had common toilets in schools; while 42.58 percent schools had separate toilets for girls in 2006-07. The corresponding figures in 2005-06 were 52.39 percent common toilets and 37.42 percent separate girls' toilets. There are more schools with common toilets in the urban areas (68.89 percent against 66.05 percent in 2005-06) than in the rural areas (56.66 percent against 50.72 percent in 2005-06); this is true for all types of schools. Urban areas also have girls' toilets in case of 64.96 percent (61.90 percent in 2005-06) schools, whereas 39.52 percent (34.17 percent in 2005-06) such schools are located in rural areas. A significant difference in percentage in the availability of toilets is also noticed in schools under government and private managements. As against 68.97 percent private schools with common toilets, the percentage of such schools under government managements is as low as 55.75 percent (48.95 percent in 2005-06). This is also true for schools with girls' toilets. As against 68.58 percent such schools under private managements, the percentage in case of government schools is low at 36.64 percent

Table B20
Percentage of Schools Having Common Toilets in School : 2006-07

School Category	Percentage							
	All Areas				Rural Areas	Urban Areas	All Government Managements	All Private Managements
	2003-04	2004-05	2005-06	2006-07				
Primary Only	36.16	41.43	47.55	53.75	52.82	63.09	52.52	63.97
Primary with Upper Primary	56.93	61.61	63.86	69.01	67.44	75.48	66.51	75.57
Primary with Upper Primary & Secondary/Hr. Secondary	69.61	69.88	66.25	71.78	68.65	76.86	65.93	75.33
Upper Primary Only	44.25	48.52	56.25	60.33	59.61	66.57	59.71	62.33
Upper Primary & Secondary/ Hr. Secondary	63.61	60.49	64.39	66.91	64.73	73.80	60.02	74.78
All Schools	**41.81**	**46.82**	**52.39**	**58.13**	**56.66**	**68.89**	**55.75**	**68.97**

Figure 2.29
Percentage Distribution of Schools Having Common Toilet : All States



(30.73 per cent in 2005-06). Tables B20 and B21 further reveal that a good percentage of schools are yet to be provided toilets, which is true for all school types. About 69 percent independent Elementary and more than 67 percent Upper Primary attached to Secondary and Higher Secondary schools across 609 districts have provided common toilets. However, about 28 percent integrated Higher Secondary schools are yet to provide common

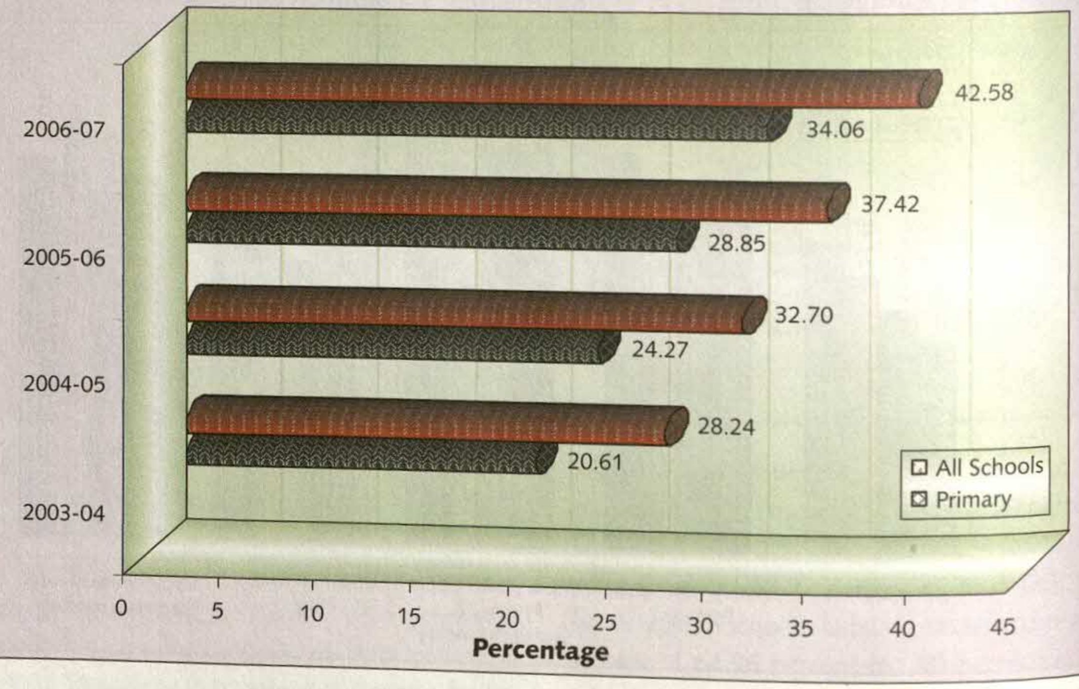
Table B21

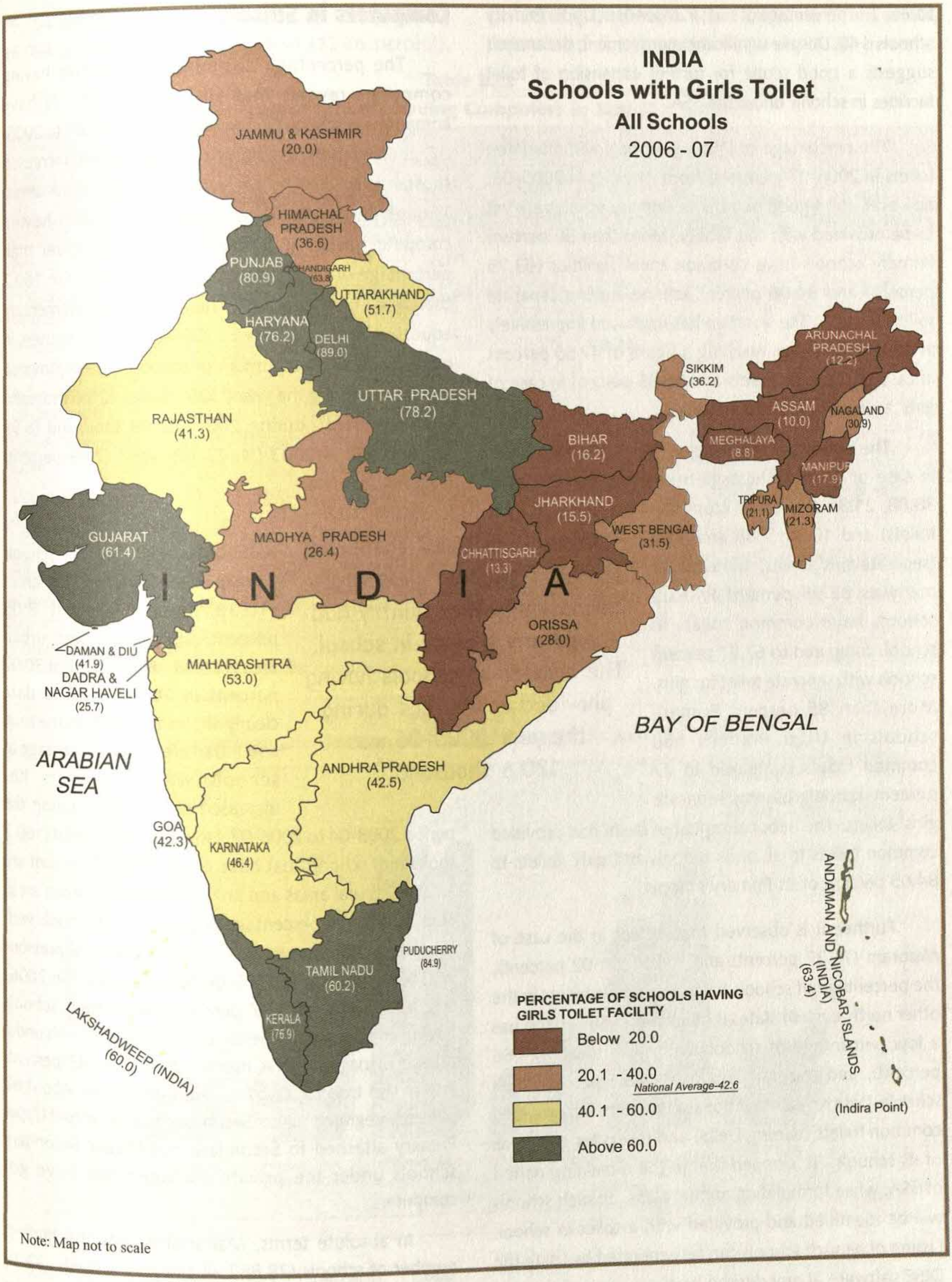
Percentage of Schools Having Girls Toilets in School : 2006-07

School Category	Percentage							
	All Areas				Rural Areas	Urban Areas	All Government Managements	All Private Managements
	2003-04	2004-05	2005-06	2006-07				
Primary Only	20.61	24.27	28.85	34.06	32.44	50.15	31.11	56.98
Primary with Upper Primary	41.86	46.76	49.09	55.37	51.05	73.12	47.87	74.96
Primary with Upper Primary & Secondary/Hr. Secondary	72.48	76.55	76.28	74.49	68.20	84.45	60.24	82.96
Upper Primary Only	32.91	36.91	46.58	52.62	50.62	69.91	48.61	65.60
Upper Primary & Secondary/ Hr. Secondary	69.31	70.47	72.42	72.32	68.67	83.74	60.20	86.12
All Schools	**28.24**	**32.70**	**37.42**	**42.58**	**39.52**	**64.06**	**36.64**	**68.58**

Figure 2.30

Percentage Distribution of Schools Having Girls Toilet : All States




INDIA
Schools with Girls Toilet
All Schools
2006 - 07
JAMMU & KASHMIR (20.0)
HIMACHAL PRADESH (36.6)
PUNJAB (80.9)
CHANDIGARH (63.8)
UTTARAKHAND (51.7)
HARYANA (76.2)
DELHI (89.0)
UTTAR PRADESH (78.2)
RAJASTHAN (41.3)
ARUNACHAL PRADESH (12.2)
SIKKIM (36.2)
ASSAM (10.0)
NAGALAND (30.9)
MEGHALAYA (8.6)
MANIPUR (17.9)
TRIPURA (21.1)
MIZORAM (21.3)
BIHAR (16.2)
JHARKHAND (15.5)
WEST BENGAL (31.5)
GUJARAT (61.4)
MADHYA PRADESH (26.4)
CHHATTISGARH (13.3)
I N D I A
ORISSA (28.0)
DAMAN & DIU (41.9)
DADRA & NAGAR HAVELI (25.7)
MAHARASHTRA (53.0)
BAY OF BENGAL
ARABIAN SEA
ANDHRA PRADESH (42.5)
GOA (42.3)
KARNATAKA (46.4)
ANDAMAN AND NICOBAR ISLANDS (INDIA) (63.4)
PUDUCHERRY (84.9)
TAMIL NADU (60.2)
KERALA (76.9)
LAKSHADWEEP (INDIA) (60.0)
(Indira Point)
PERCENTAGE OF SCHOOLS HAVING GIRLS TOILET FACILITY
Below 20.0
20.1 - 40.0
National Average-42.6
40.1 - 60.0
Above 60.0
Note: Map not to scale

Map 2.5

toilets. The percentage of such independent Upper Primary schools is 40. Despite significant improvement, the analysis suggests a good scope for further expansion of toilet facilities in schools under the SSA.

The percentage of Primary schools with common toilets in 2006-07 increased from its value in 2005-06; however, still a good number of Primary schools are yet to be provided with the facility. More than 50 percent Primary schools have common toilet facilities (53.75 percent) and 34.06 percent schools having separate toilets for girls. The situation has improved impressively in the previous year, reaching a figure of 47.55 percent in case of common toilets and 28.85 percent in case of girls' toilets (Tables B20 and B21).

The respective percentage of such Primary schools in case of Bihar, Chhattisgarh and Jharkhand is only 38.88, 21.35 and 14.71 (common toilets) and 10.28, 7.88 and 8.68 (separate girls' toilets). In Kerala, as many as 82.98 percent Primary schools have common toilets in school, compared to 67.87 percent schools with separate toilet for girls. More than 85 percent Primary schools in Uttar Pradesh had common toilets compared to 77 percent schools having separate girls' toilets. The national capital of Delhi had provided common toilets to all of its schools and girls' toilets to 84.65 percent of its Primary schools.

> "More than 160.7 thousand schools imparting elementary education in the country had computers in place in school. The number of schools having provided computers during the year 2005-06 was 120.6 thousand"

Further, it is observed that except in the case of Mizoram (75.37 percent) and Sikkim (91.02 percent), the percentage of schools having common toilets in the other north-eastern states is much lower. Sikkim too has a low percentage of schools with girls' toilets (24.66 percent), and Mizoram has only 15.51 percent such schools. Data reveals that not a single state has provided common toilets (barring Delhi) and toilets for girls to all of its schools. It is hoped that in the remaining period of SSA, while formulating annual plans, all such schools will be identified and provided with a toilet in school. Listing of all such schools can be generated by using the DISE software at any desired level.

Computers in Schools

The percentage distribution of schools having computers reveals that all types of schools have computers in school. During the period 2003-04 to 2006-07, the number of schools with computers increased substantially, both in percentage and absolute terms. Though the percentage of Primary schools having computer facility (6.51 percent) is much lower than percentage of other types of schools, more than 160.7 thousand (13.43 percent) schools imparting elementary education in the country in 2006-07 had computers in place in school. The number of schools having provided computers during the year 2005-06 was 120.6 thousand (10.73 percent), during 2004-05, 93 thousand (8.99 percent) and in 2003-04, 72 thousand (7.68 percent) (Table B22).

A significant difference is noticed in percentage of schools having computer in rural areas (10.33 percent against 8.05 percent in 2005-06) and urban areas (34.94 percent against 30.07 percent in 2005-06). The data clearly shows that both in the rural and urban areas, the percentage of schools with computers has increased considerably during the period 2003-04 to 2006-07. However, of the total (160.7 thousand) schools that have computers, 67 percent are located in rural areas and only 33 percent in urban areas (Table B22). The percentage of government schools with computers has shown improvement over the previous year (6.57 percent in 2005-06 to 8.57 percent in 2006-07). Compared to 8.57 percent government schools having computers, the percentage in case of schools under private managements is much higher at 34.43 percent. This is also true for all other types of schools. About 62 percent integrated Higher Secondary and 59 percent Upper Primary attached to Secondary and Higher Secondary schools under the private managements have got computers.

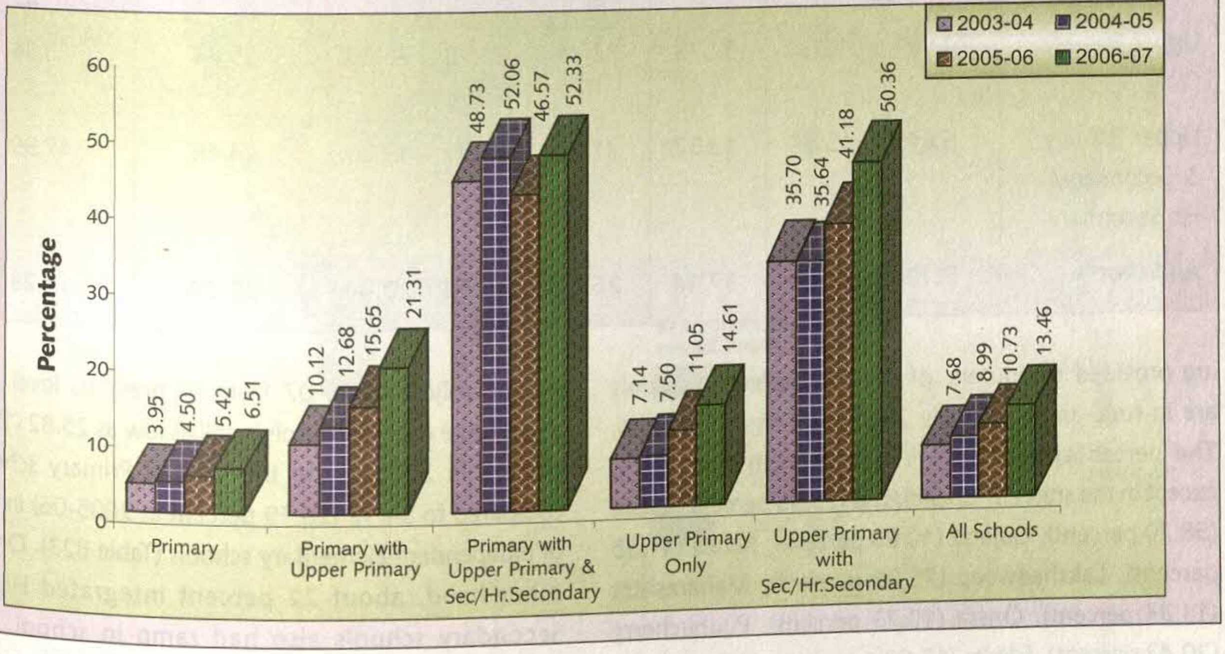
In absolute terms, Maharashtra has the highest number of schools (28,882 all category schools; 33.42 percent) that have computers in schools, followed by

19,154 schools in Andhra Pradesh (18.987 percent), 16,064 schools in Madhya Pradesh (12.76 percent), 13,336 schools in Rajasthan (13.21 percent), 11,603 schools in Tamil Nadu (22.13 percent), 9,244 schools in Gujarat (24.03 percent), 6,070 schools in Orissa (11.86 percent) and 7,429 schools in Kerala (60.90 percent).

Table B22
Percentage of Schools Having Computers in School : 2006-07

School Category	Percentage							
	All Areas				Rural Areas	Urban Areas	All Government Managements	All Private Managements
	2003-04	2004-05	2005-06	2006-07				
Primary Only	3.95	4.50	5.42	6.51	5.34	18.20	4.68	20.33
Primary with Upper Primary	10.12	12.68	15.65	21.31	16.55	40.83	15.04	37.65
Primary with Upper Primary & Secondary/ Hr. Secondary	48.73	52.06	46.57	52.33	42.05	68.38	35.81	62.09
Upper Primary Only	7.14	7.50	11.05	14.61	11.82	38.66	10.60	27.57
Upper Primary & Secondary/ Hr. Secondary	35.70	35.64	41.18	50.36	45.04	66.99	42.43	59.40
All Schools	**7.68**	**8.99**	**10.73**	**13.43**	**10.33**	**34.94**	**8.57**	**34.43**
Number of Schools with Computers	71,501	93,249	1,20,591	1,60,749	1,07,702	53,047	82,859	77,890

Figure 2.31
Percentage Distribution of Schools Having Computer in School



About 68.85 percent schools in Delhi in 2006-07 had computers. The lowest numbers, 12 schools, with

computer facility is in the Dadra & Nagar Haveli, followed by 15 schools in Daman & Diu, 22 schools in Lakshadweep, and 119 schools in Andaman & Nicobar Islands. In Bihar too, the percentage of schools with computers was found to be low at 2.62 (1,436 schools).

As mentioned above, the percentage of Primary schools having computers is much lower (6.51 percent) than that of the other school types. It is high at 18.20 percent in urban areas and low at 5.34 percent in rural areas. As many as 50,747 Primary schools in 2006-07 are provided computers, of which 75 percent schools are in rural areas and only 25 percent in urban areas. The percentage of Primary schools with computers, except in the states of Chandigarh (23.33 percent), Delhi (58.20 percent), Gujarat (10.80 percent), Kerala (41.35 percent), Lakshadweep (75.00 percent), Maharashtra (11.34 percent), Orissa (10.79 percent), Pudhucherry (20.42 percent), Sikkim (12.50 percent) and Tamil Nadu (11.49 percent), has been lower than two digits in rest of the states. In absolute terms, Madhya Pradesh (7,404 schools; 8.44 percent) had the highest number of Primary schools with computers. The percentage of such schools was as low as 2.16 percent in Bihar (800 schools) and 2.65 percent in West Bengal (1,476 schools).

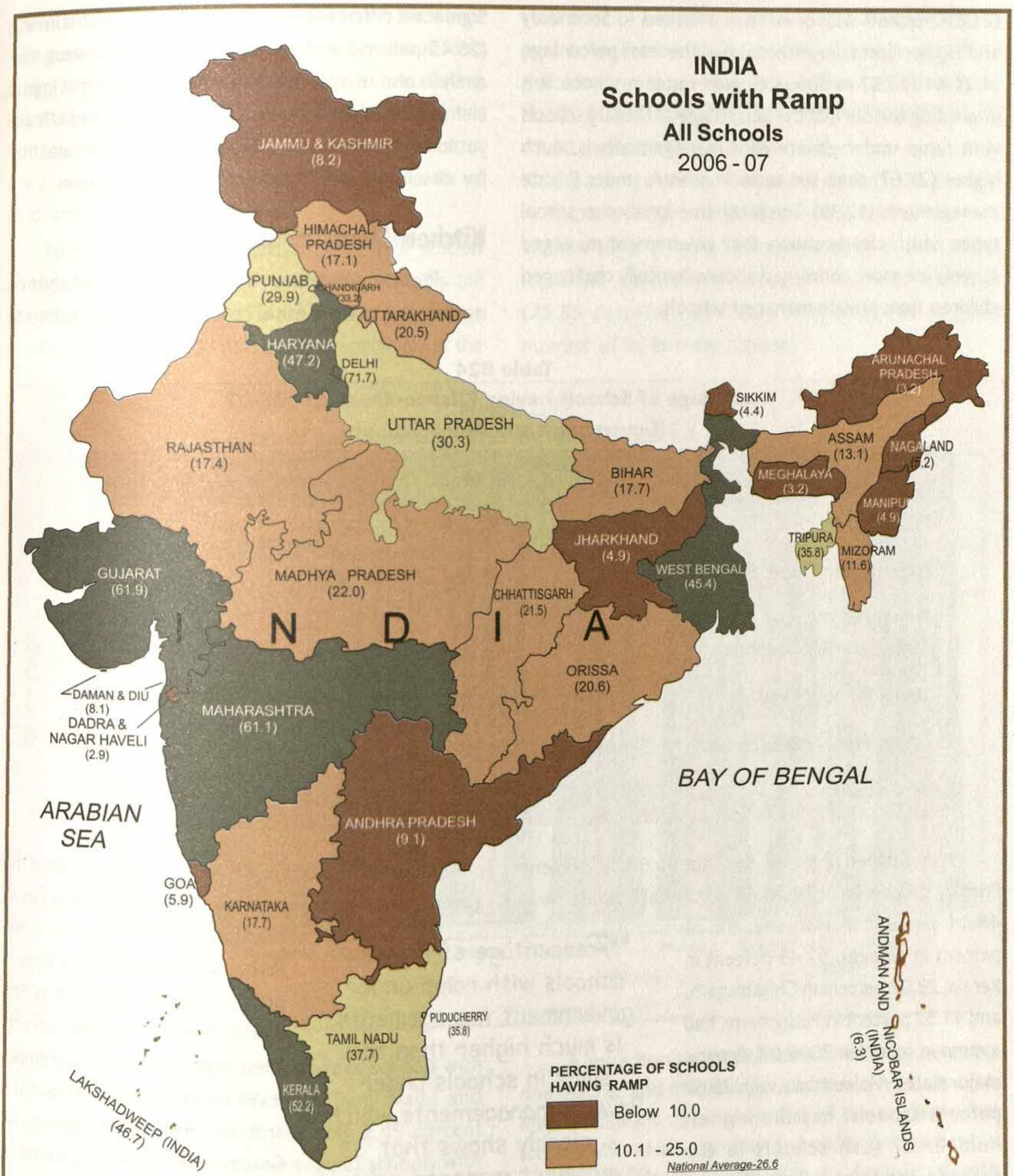
Ramp in Schools

Every fourth school that imparts elementary education in the country has a ramp. The percentage of such schools, irrespective of school type, has increased significantly in 2006-07 from its previous level. The percentage of such schools is still as low as 25.82 (15.65 percent in 2005-06) in the case of Primary schools, compared to 34.12 (26.19 percent in 2005-06) in case of independent Elementary schools (Table B23). On the other hand, about 22 percent integrated Higher Secondary schools also had ramp in school. The percentage of such schools in urban areas (22.65 percent) is slightly higher than the same in rural areas

Table B23

Percentage of Schools Having Ramp in School : 2006-07

School Category	Percentage							
	All Areas				Rural Areas	Urban Areas	All Government Managements	All Private Managements
	2003-04	2004-05	2005-06	2006-07				
Primary Only	4.98	11.21	15.65	25.82	26.45	19.56	27.67	12.39
Primary with Upper Primary	5.16	14.48	26.19	34.12	36.86	22.91	41.61	14.64
Primary with Upper Primary & Secondary/Hr. Secondary	8.58	12.85	18.05	21.97	21.59	22.65	29.73	17.46
Upper Primary Only	4.69	8.33	12.78	22.74	22.98	20.69	25.64	13.36
Upper Primary & Secondary/ Hr. Secondary	6.64	10.87	13.32	21.44	21.95	19.85	24.48	17.99
All Schools	**5.10**	**11.49**	**17.14**	**26.61**	**27.51**	**20.80**	**29.59**	**14.23**


INDIA
Schools with Ramp
All Schools
2006 - 07
JAMMU & KASHMIR (8.2)
HIMACHAL PRADESH (17.1)
PUNJAB (29.9)
CHANDIGARH (33.2)
UTTARAKHAND (20.5)
HARYANA (47.2)
DELHI (71.7)
UTTAR PRADESH (30.3)
RAJASTHAN (17.4)
SIKKIM (4.4)
ARUNACHAL PRADESH (3.2)
ASSAM (13.1)
NAGALAND (5.2)
MEGHALAYA (3.2)
MANIPUR (4.9)
TRIPURA (35.8)
MIZORAM (11.6)
BIHAR (17.7)
JHARKHAND (4.9)
WEST BENGAL (45.4)
GUJARAT (61.9)
MADHYA PRADESH (22.0)
CHHATTISGARH (21.5)
N D I A
ORISSA (20.6)
DAMAN & DIU (8.1)
DADRA & NAGAR HAVELI (2.9)
MAHARASHTRA (61.1)
BAY OF BENGAL
ARABIAN SEA
ANDHRA PRADESH (9.1)
GOA (5.9)
KARNATAKA (17.7)
ANDMAN AND NICOBAR ISLANDS (INDIA) (6.3)
PUDUCHERRY (35.8)
TAMIL NADU (37.7)
KERALA (52.2)
LAKSHADWEEP (INDIA) (46.7)
(Indira Point)
PERCENTAGE OF SCHOOLS HAVING RAMP
Below 10.0
10.1 - 25.0
National Average-26.6
25.1 - 40.0
Above 40.0
Note: Map not to scale

Map 2.6

(21.59 percent). Upper Primary attached to Secondary and Higher Secondary schools had the least percentage of 21.44 (13.32 in 2005-06) with ramp in school. It is interesting to note that the percentage of Primary schools with ramp under government managements is much higher (27.67) than the same in schools under Private managements (12.39). This is also true for all other school types which clearly shows that government managed schools are more concerned about physically challenged children than private managed schools.

It is further revealed that about 67.33 percent Primary schools in Delhi, 75.67 percent in Maharashtra, 46.11 percent in Haryana, 58.74 percent in Gujarat, 52.45 percent in Kerala, 23.02 percent in Chhattisgarh, and 41.52 percent in Puducherry, had a ramp in school in 2006-07. Among major states, Maharashtra with 75.67 percent schools, has the highest number of such schools in the country; the lowest percentage of such schools is in Dadra & Nagar Havelli (1.96 percent). The percentage of such schools is also low in the states of Jharkhand (3.22 percent), Andhra Pradesh (7.16 percent), Jammu & Kashmir (5.27 percent), Karnataka (9.77 percent) etc.

> "Percentage of Primary schools with ramp under government managements is much higher than the same in schools under Private managements which clearly shows that government managed schools are more concerned about physically challenged children than private managed schools"

Significant difference is noticed in schools located in rural (26.45 percent) and urban (19.56 percent) areas. The analysis also reveals that majority of schools that impart elementary education across all the States and UTs are yet to be provided with ramp in the school; it is also true for all school types both in rural and urban areas.

Kitchen-Sheds in School

Providing nutritious food (cooked) to all children under the noon-meal (mid-day meal scheme) programme is one of the ambitious programmes of the government. The scheme is under implementation in all the States and UTs of the country. Perhaps it is one of the largest programmes of its kind in the world. The scheme has recently been extended to Upper Primary level of education. With this, around 194 million children in Grades I to VIII are supposed to be covered under the scheme. Management of a scheme of this scale in itself is challenging one for which each and every school covered under the scheme is supposed to have necessary infrastructure, such as availability of kitchen-shed in school that is the most

Table B24

Percentage of Schools having Kitchen-Sheds : 2006-07

(Government and Aided Schools)

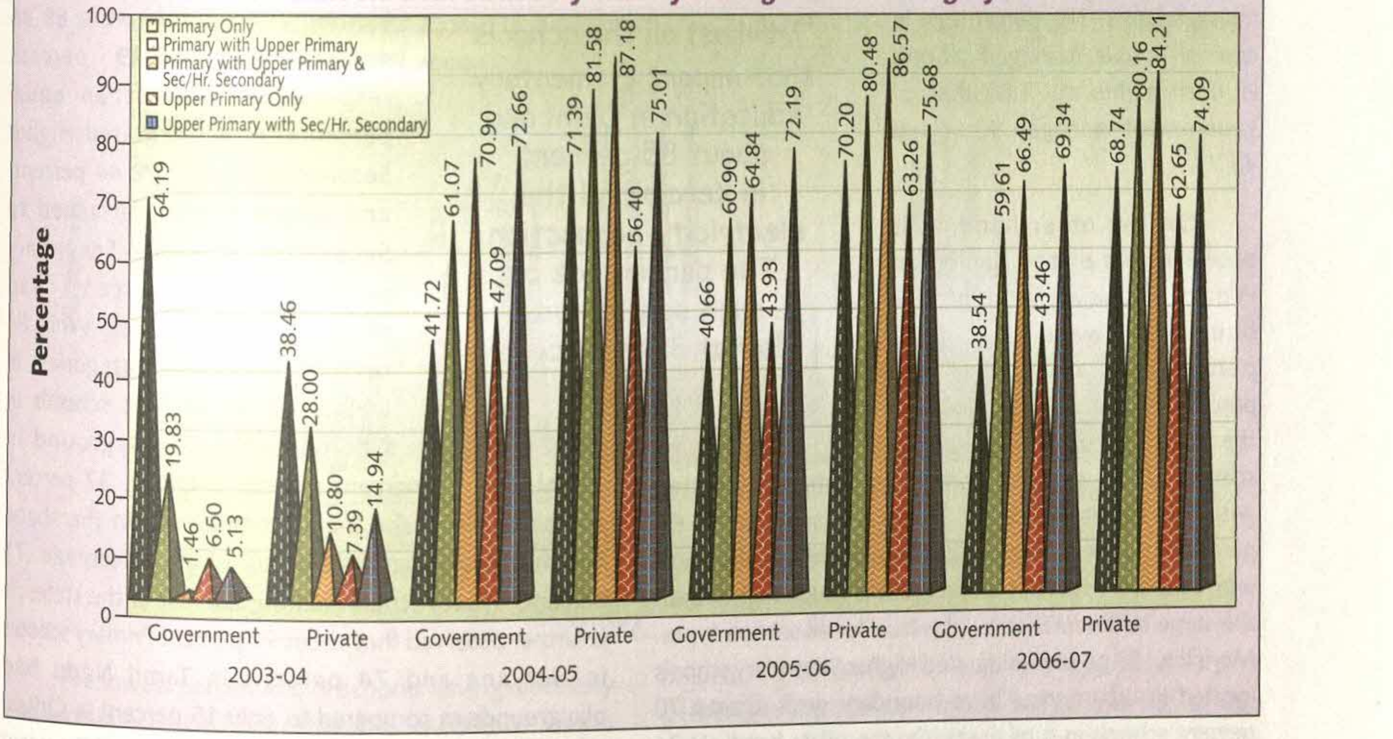
School Category	All Areas	Rural Areas	Urban Areas
Primary Only	32.62	33.33	23.19
Primary with Upper Primary	21.84	32.81	25.14
Primary with Upper Primary & Secondary/ Hr. Secondary	21.81	21.99	21.40
Upper Primary Only	11.02	10.00	23.30
Upper Primary & Secondary/Hr. Secondary	13.89	13.55	15.32
All Schools	**29.36**	**30.03**	**22.59**

essential. Different states have evolved different arrangements to ensure daily supply of nutritious food to all of its children in Grades I to VIII. The full monitoring information system is yet to be developed but for the first time, a variable on availability of kitchen-shed in school was added to DISE during 2006-07, details of which are presented in Table B24.

Table B24 reveals that 29.26 percent of schools managed by the Government and Aided schools (all categories) have kitchen-shed in school. The percentage of such schools are 30.03 and 22.59 respectively in the rural and urban areas. The percentage of schools with kitchen-shed varies from 80.11 in Tamil Nadu and 70.79 percent in Maharashtra to only 2.59 percent in Jammu & Kashmir. The percentage of schools with kitchen in Kerala is 43.19, compared to 13.22 percent in the national capital of Delhi. Except Manipur (70.79 percent), around 35 percent schools in other north-eastern states have kitchen-shed in school. A look at percentage of Primary schools with kitchen-shed suggests that majority of our Primary schools are yet to be provided with kitchen-shed (32.62 percent). However, a number of states have much higher percentage than the national average of 32.62 percent. The percentage is as high as 77.56 in Tamil Nadu, 41.25 in Uttar Pradesh, 67.89 in West Bengal, 47.50 percent in Assam etc. On the other hand, only 7.10 percent Primary schools in Bihar, 8.24 percent in Maharashtra and 7.92 percent in Punjab had kitchen-shed in their Primary schools. A few states from the north-eastern region, such as Manipur (75.85 percent), also have kitchen-sheds in good number of its Primary schools.

Figure 2.32

Schools with Boundary Wall by Management & Category



A few schools without kitchen-sheds may have only one teacher and managing cooked meal on daily basis may be difficult. It is hoped that all the single-teacher schools will not only be provided additional teacher but necessary infrastructure also to ensure smooth implementation of mid-day meal scheme.

Miscellaneous Facilities in Schools

Apart from the facility indicators presented above, a number of other provisions such as availability of boundary wall, playground facility, electricity connection, book-bank, medical check-up have also been briefly analysed in addition to shift and residential schools and pre-primary facility.

Boundary Wall

About half of total 1.20 million schools (49.26 percent) in the country had boundary walls in 2006-07. There is a significant difference in the number of schools with boundary walls located in rural areas (45.35 percent) and in urban areas (75.47 percent). It means that 8 out of 10 schools located in urban areas and 5 out of 10 schools in rural areas have boundary walls. A significant percentage difference in schools with boundary walls is also observed in schools under government managements and under private managements. The percentage in case of private managed schools is much higher at 72.85 than of government managed schools at 43.73.

On the other hand, it is observed that a good number of Primary schools are yet to provide boundary walls as their percentages are low (42.05 percent). Quite a good number of the integrated Higher Secondary schools (77.65 percent) and Upper Primary integrated with Secondary & Higher Secondary schools (70.63 percent) have boundary walls. The percentage of schools with boundary walls in urban areas is much higher than the same in the rural areas; it is true for all schools types. More than 89 percent integrated Higher Secondary schools located in urban areas have boundary walls against 70 percent schools in rural areas. On the other hand, 84.21 percent private managed Higher Secondary schools in urban areas have boundary walls compared to 66.49 percent in case of government managed schools.

> "Almost all the schools that impart Elementary education in Delhi and about 85 percent in Kerala had the electricity connection. The percentage of such schools was low at 3.60 percent in Bihar"

So far as Primary schools are concerned, the highest percentage of schools having boundary walls is noticed in the state of Delhi (98.96 percent) and the lowest in Tripura (12.91 percent). Majority of Primary schools in Chandigarh, Daman & Diu, Haryana and Punjab also had boundary walls in 2006-07. However, the situation is not as good in a number of other states. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir and Jharkhand, are a few states which are yet to provide boundary walls to majority of Primary schools. The percentage of Primary schools without boundary walls is also high in all the states in the north-eastern region.

Playground in Schools

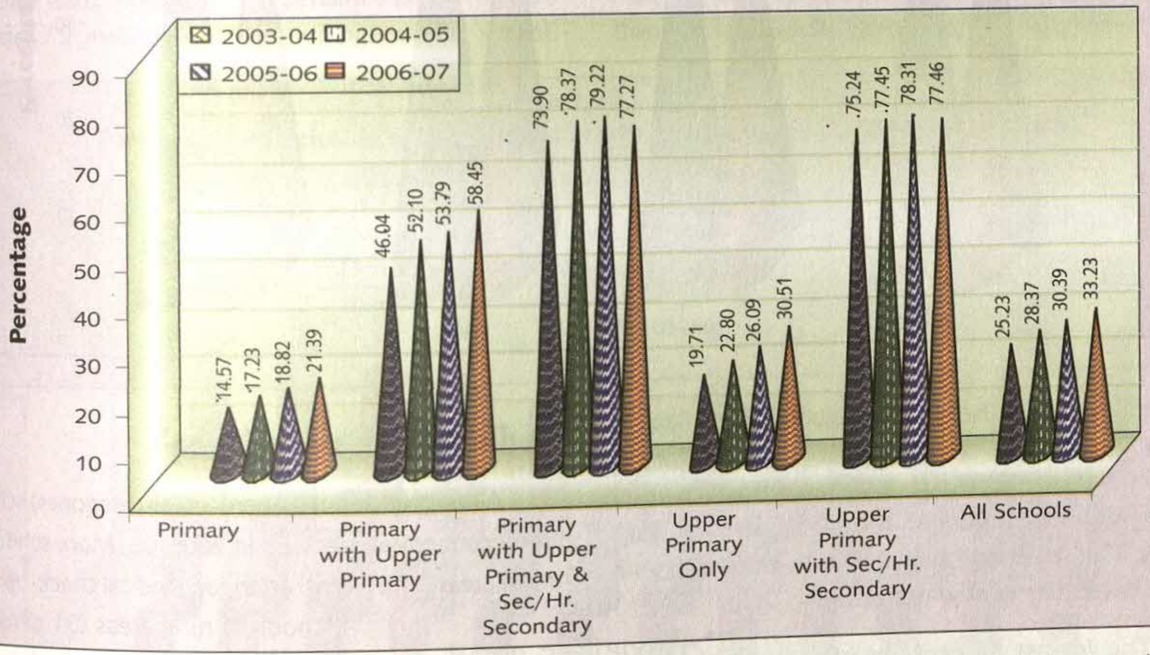
More than 52 percent schools (all categories) had playgrounds in school. The percentage of such schools in rural areas was 51 compared to 63 in urban areas. Distribution of schools having playground in 2006-07 further reveals that 45.89 percent Primary schools had playground in the school. The corresponding figures for Upper Primary schools and Elementary schools were 89.85 percent and 61.29 percent respectively. Almost an equal percentage of integrated Higher Secondary schools (78.44 percent) and Upper Primary attached to Secondary & Higher Secondary schools (79.51 percent) had playground in the school. While 84 percent schools (all categories) in Delhi and 90 percent schools in Chandigarh had playground in school, only 20 percent schools in Orissa, 37 percent schools in Bihar, and 24 percent schools in Jharkhand had this facility. Tamil Nadu has a high percentage (77 percent) of such schools among the rest of the states. It is further observed that about 77 percent Primary schools in Haryana and 74 percent in Tamil Nadu had playgrounds as compared to only 15 percent in Orissa. About 64 percent schools in Uttar Pradesh and 77 percent schools in Delhi also had playground in 2006-07. In north-eastern states, the percentage of such Primary schools varies from 9.44 percent in Mizoram to 52.70 percent in Tripura.

Electricity Connection

The percentage of schools with electricity connection has shown an increasing trend over a period of time. Even then, only 33.23 percent schools (all types) had electricity connection in 2006-07. Majority of such schools, 71 percent, in urban areas had electricity connection compared to only 28 percent schools located in rural areas. Chandigarh could provide electricity connection to all of its schools. Almost all the schools (99.60 percent) that impart Elementary education in Delhi and about 85 percent in Kerala had the electricity connection. Majority of this type of schools in Daman & Diu, Goa, and Lakshadweep also had electricity connection in school. The percentage of such schools was low at 3.60 percent in Bihar, 5.44 percent in Jharkhand and 6.53 percent in Assam. Only 15 states had electricity connection in more than 50 percent of their total number of schools.

Figure 2.33

Percentage Distribution of Schools Having Electricity Connection in School



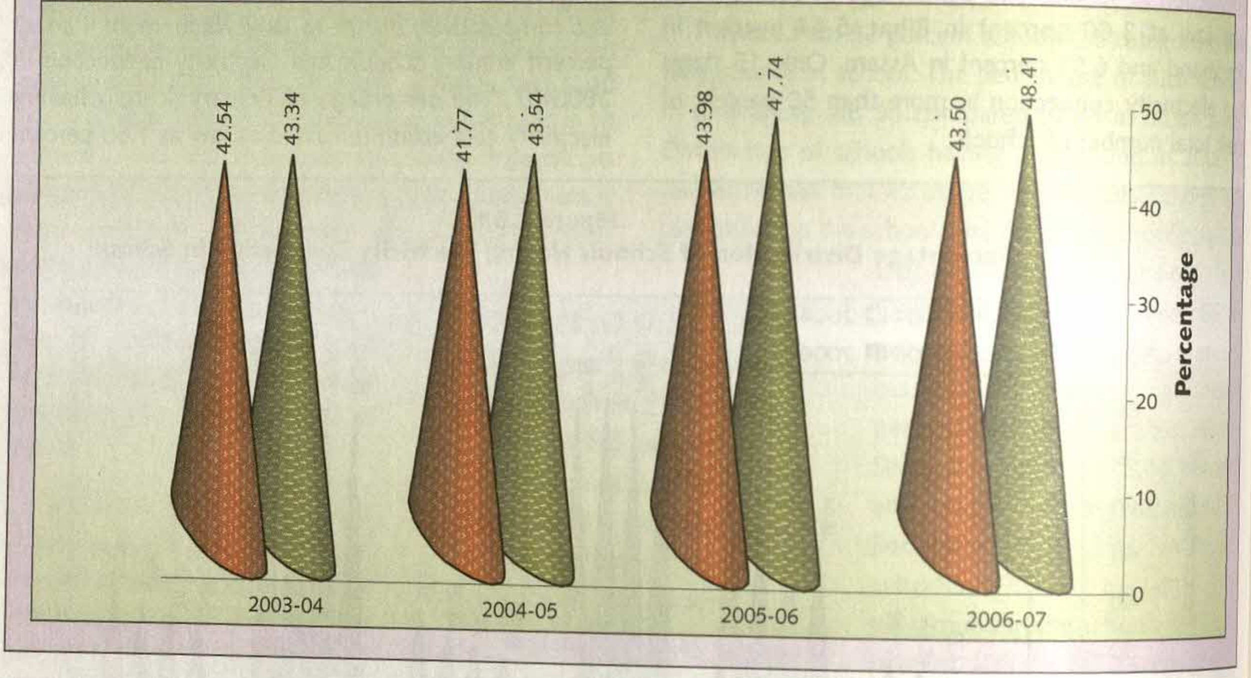
The lowest percentage of schools having electricity connection across school categories in 2006-07 was in Primary schools (21.39 percent). On the other hand, 31 percent Upper Primary schools had electricity connection. Among other types of schools, Upper Primary attached to Higher Secondary schools (77 percent) and integrated Higher Secondary schools (77 percent) have electricity connection in much higher numbers than that in Primary and Upper Primary schools. More than 86 percent private integrated Higher Secondary schools had electricity connection while only 62 percent such schools under government managements had this facility. The percentage of such schools in urban areas is about 93 compared to 67 in rural areas.

Further, about 77 percent Primary schools in Kerala had electricity connection in 2006-07. Chandigarh has electricity connection in all of its Primary schools, while 89 percent such schools in Goa have electricity connection. The percentage of such schools was also high in Delhi (99.54 percent) and Puducherry (97.23 percent). The percentage of schools with electricity connection in other types of schools in these states was also comparatively higher. In Tamil Nadu, more than 59 percent Primary schools had electricity connection in 2006-07. The percentage of Primary schools having electricity connection remained as low as 1.60 percent in Bihar, 10.22 percent in Jammu & Kashmir and 2.17 percent in Jharkhand. Maharashtra too has a high percentage (55.86 percent) of such Primary schools. States from the north-eastern region too had a low percentage of such schools.

Book-Bank in Schools

Much difference is noticed in the availability of Book-Bank in schools located in rural (47 percent) and urban areas (57 percent); it is true for all school types. About 75 percent Upper Primary schools attached to Secondary and Higher Secondary schools in urban areas have Book-Banks against 71 percent in rural areas. About 87 percent schools (all categories) in Haryana and 86 percent in Maharashtra have Book-Banks in their premises. In Delhi, the percentage of schools with Book-Bank is higher at 96. Further, about 59 percent Elementary schools had the provision of Book-Bank in school in 2006-07. About 96 percent this category of schools in Delhi, 88 percent in Maharashtra, 84 percent in Haryana and 68 percent in Uttar Pradesh had such facility. The percentage in all the north-eastern states is much lower than in other states.

Figure 2.34
Percentage Distribution of Schools Having Book Bank in School



The lowest percentage of schools with Book-Banks is observed in case of Primary schools. About 93 percent Primary schools in Delhi and 89 percent in Haryana had a Book-Bank in school in 2006-07. The percentage of such schools is also high in the state of Maharashtra (84.45 percent). Comparatively, the percentage of Primary schools with Book-Bank in the states of Arunachal Pradesh (9.87 percent), Assam (17.04 percent), Bihar (28.11 percent) and Jammu & Kashmir (29.45 percent), was found to be much lower than in other states. It is also low at 5.17 percent in Mizoram, 14.35 percent in Meghalaya, 7.06 percent in Tripura, and 14.09 percent in Sikkim. Incidentally, all these states are from the north-eastern region of the country.

Medical Check-up in Schools

Altogether, about 52 percent (all categories) schools arranged medical check-up in 2005-06. More schools in urban areas (57 percent) arranged medical check-up than schools in rural areas (51 percent). The percentage in case of private managed schools that arranged medical check-up was found slightly higher (53) than the same in case of government managed schools (52 percent). About 49 percent Primary schools arranged medical check-up in 2005-06. The percentage of such schools was higher in case of Elementary schools (64 percent), integrated Higher Secondary schools (62 percent), and Upper Primary with Secondary & Higher Secondary schools (56 percent). Only 44 percent Upper Primary schools arranged medical check-up. States, such as Delhi

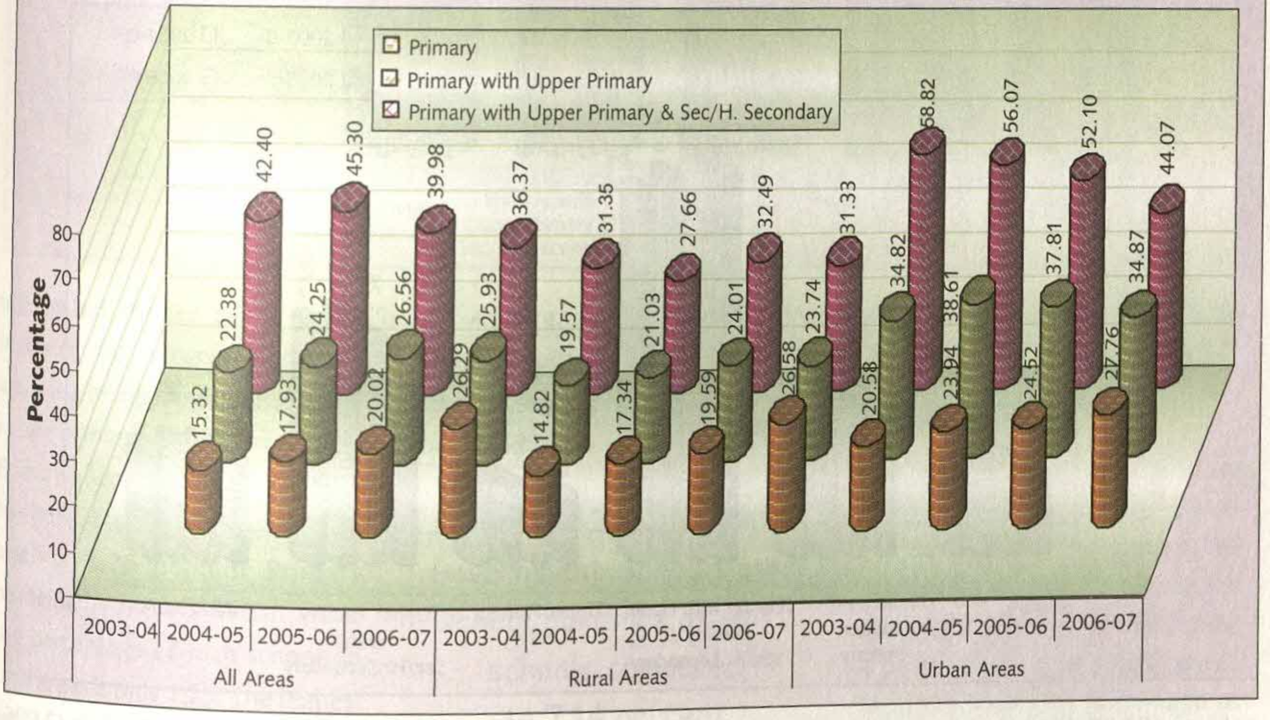
> "Altogether, about 52 percent schools arranged medical check-up in 2005-06. More schools in urban areas arranged medical check-up than schools in rural areas"

(89 percent), Gujarat (92 percent), Maharashtra (88 percent), Rajasthan (76 percent) and Tamil Nadu (90 percent) arranged medical check-up in majority of their schools (all categories). About 55 percent schools in Uttarakhand and about 58 percent schools in Andhra Pradesh also arranged medical check-up.

On the other hand, majority of schools in Arunachal Pradesh, Assam, Bihar, Jammu & Kashmir, Jharkhand, Manipur, Meghalaya, Nagaland, and West Bengal did not arrange medical check-up for their children. About 90 percent Primary schools in Chandigarh, Delhi, Maharashtra and Tamil Nadu carried out medical check-up in schools as compared to 5.97 percent schools in Assam and 6.29 percent in Manipur. In Kerala also, more than 72 percent Primary schools provided for medical check-up arrangement in school.

Figure 2.35

Percentage of Schools with attached Pre-Primary Section : 2003-04 to 2006-07



More than 87 percent Primary schools in Chhattisgarh and 76 percent schools in Rajasthan also arranged medical check-up during the year.

Pre-Primary Sections

The percentage of Primary schools having attached pre-primary sections increased from 20.02 in 2005-06 to 26.69 percent in 2006-07. It is observed that schools located in urban areas have more such sections (28 percent) than those located in rural areas (27 percent). It is also observed that a pre-primary section is also attached to a large number of Elementary schools (26 percent) and integrated Higher Secondary schools (36 percent). A wide deviation is noticed in the percentages of these types of schools located in rural and urban areas. As compared to 44 percent integrated Higher Secondary schools with attached pre-primary sections in urban areas, the percentage of such schools in rural areas in 2006-07 is only 31. This is also true in case of independent Elementary schools (rural areas, 24 percent; and urban areas, 35 percent). The percentage of Primary schools with attached pre-primary sections is much higher in schools under private managements (36) than in schools under government managements (25).

The states of Arunachal Pradesh (60.92 percent), Assam (54.53 percent), Haryana (62.38 percent), Jammu & Kashmir (81.20 percent), Karnataka (34.51 percent), Madhya Pradesh (46.92 percent), Maharashtra (41.74 percent) and Uttar Pradesh (32.12 percent), have a large number of pre-primary sections attached to Primary schools. Incidentally, all these states, except Arunachal Pradesh and Jammu & Kashmir, are DPEP states. In

Chandigarh too, majority of Primary schools have attached pre-primary sections (86.67 percent). The capital city of Delhi has 36.84 percent such Primary schools. Majority of Primary schools in the north-eastern region also have attached pre-primary sections. The percentage of such schools is as high as 85.39 in Meghalaya, 95.34 in Nagaland and 96.48 in Sikkim.

> "More than 35 percent of the Elementary schools located in the urban areas have attached pre-primary sections compared to 24 percent such schools in rural areas"

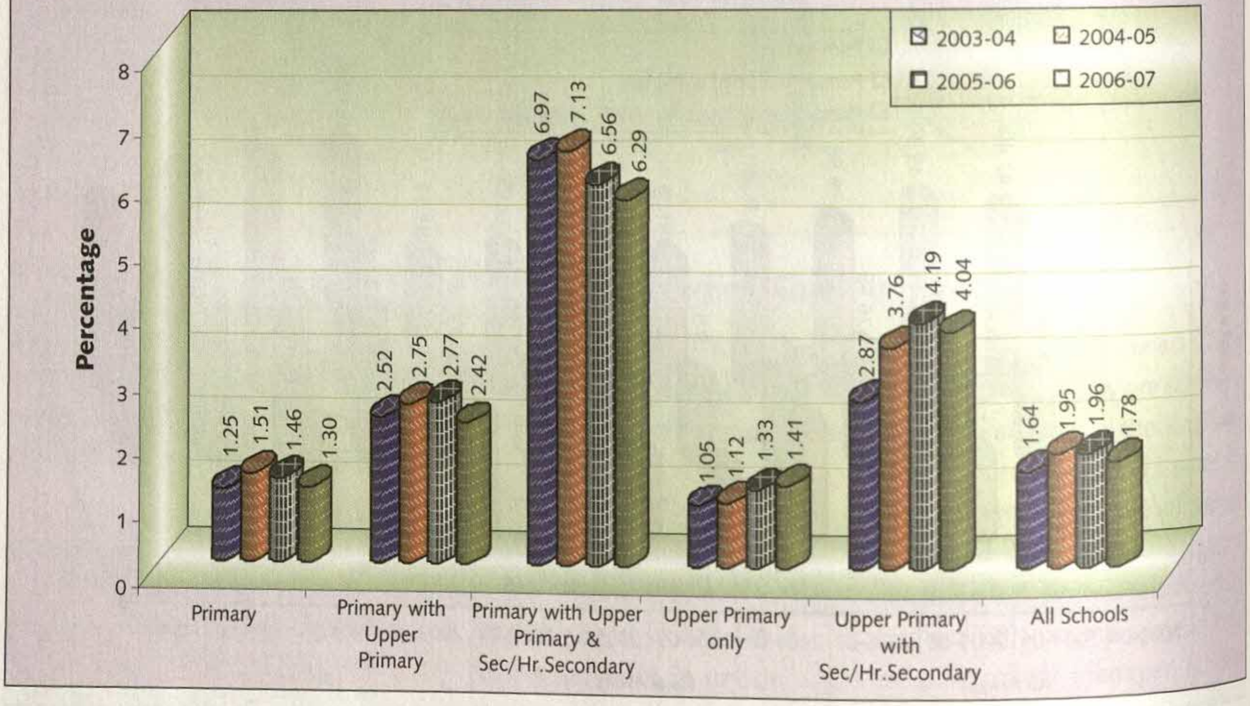
Not only Primary schools have attached pre-primary sections but a good number of independent Elementary schools in a number of states also have attached pre-primary sections. The percentage of such schools, as in 2006-07, has been as high as 25.93. More than 35 percent of the Elementary schools located in the urban areas have attached pre-primary sections compared to 24 percent such schools in rural areas. The percentage of such schools is as high as 89 in Chandigarh compared to 60.99 and 75 percent respectively in the states of Himachal Pradesh, and 82 percent in Jammu & Kashmir. States from the north-eastern states, namely Meghalaya (79 percent), Mizoram (77 percent), Nagaland (91 percent) and Sikkim (99 percent) too have a good number of such schools.

Residential Schools

The percentage distribution of schools which are residential in nature has been low across the school categories. There were only 1.78 percent schools in 2006-07 that were residential in nature. Not much difference is noticed between rural (1.70 percent) and urban areas (2.37 percent). The highest number of such schools was in Madhya Pradesh (3,812 schools) and the lowest (2) in the Andaman & Nicobar Islands. Andhra Pradesh (3,096 schools) and Maharashtra (3,128 schools) also had a good number of residential schools. The national capital of Delhi has 57 such schools compared to only 7 in the Union Territory of Chandigarh.

Further, all types of schools imparting Elementary education have a few residential schools though their percentage varies from type to type. The percentage of

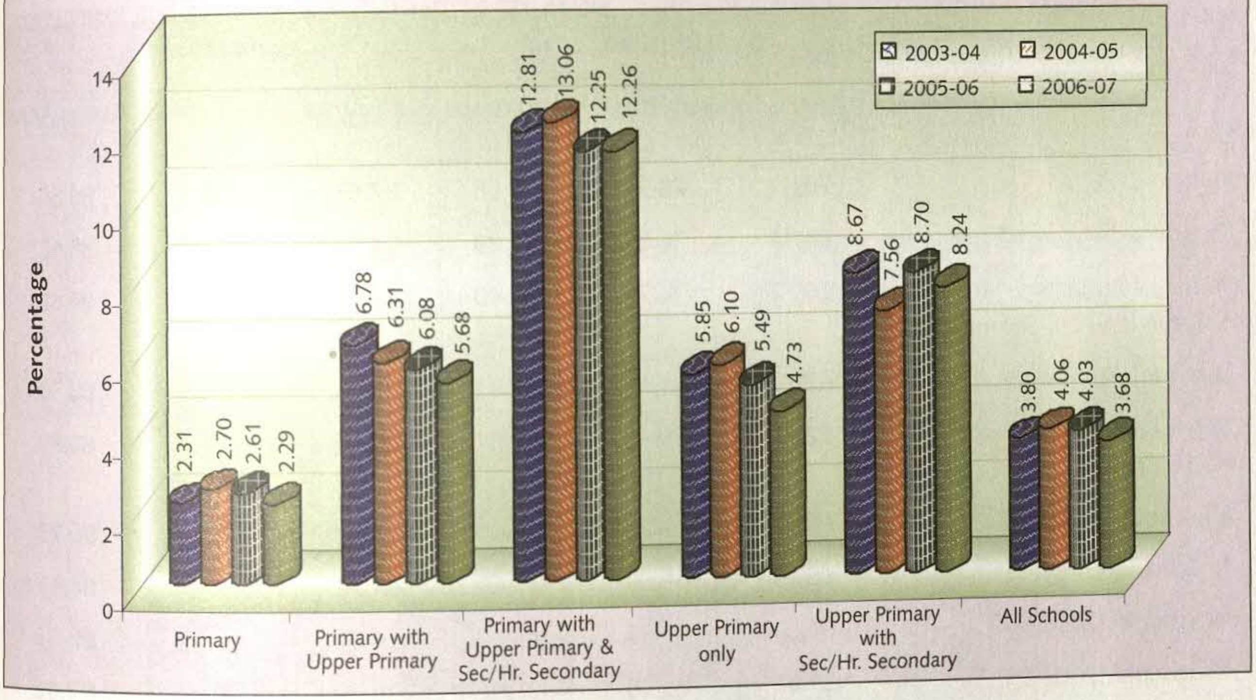
Figure 2.36
Percentage of Residential Schools : All States



Primary schools, which are residential in nature, is only 1.30, as compared to 1.41 of Upper Primary, 2.42 of Elementary schools, 4.04 of Upper Primary attached to Secondary & Higher Secondary schools, and 6.29 integrated Higher Secondary schools. As already indicated, the percentage of residential schools in urban areas is a bit higher than the same in rural areas (except in case of integrated Higher Secondary schools and Upper Primary attached to Secondary and Higher Secondary schools). As against 1.75 percent Primary residential schools in urban areas, the percentage of such schools in rural areas is only 1.25. The highest percentage of residential schools is observed in case of integrated Higher Secondary schools in rural areas (7.70), compared to only 4.13 in the urban areas.

Figure 2.37

Percentage of Schools Having Used School Building as Shift School



> "About 2.89 percent Government Schools used school buildings as shift schools compared to 7.14 percent private managed schools"

The highest percentage of Primary schools which are residential in nature, is noticed to be in Sikkim (5.45), followed by Arunachal Pradesh (5.18), Meghalaya (3.77), Tripura (3.55 percent), Madhya Pradesh (3.13) and Chhattisgarh (2.58). Only 0.31 percent Primary schools in Uttar Pradesh and 0.63 percent in Kerala are residential in nature. Tamil Nadu has 1.35 percent residential schools.

Part-Time Shift Schools

The percentage distribution of schools operating as shift schools has shown an increasing trend. The analysis reveals that 3.68 percent of the total schools (all categories) use a school building as a shift school. In urban areas, the percentage of such schools is much higher (12.74 percent) than the same in the rural areas (2.37). About 2.89 percent government schools used school buildings as shift schools compared to 7.14 percent private managed schools. The percentage in case of Primary schools in 2006-07 is as low as 2.29 (rural 1.66 and urban 8.56). In absolute terms, the number of such

Primary schools in 2006-07 was 17,845. Chandigarh (10.00 percent), Daman & Diu (60.00 percent), Delhi (43.05 percent), Goa (6.17 percent), Madhya Pradesh (8.86 percent) and Maharashtra (7.66 percent) had a good number of Primary schools in 2006-07 that used school building as a shift school. In rest of the states, the percentage of such Primary schools is very low.

Table B25
Schools that Received and Utilized School Development Grant : 2006-07*

School Category	Grant Received			Grant Utilized		
	All Areas	Rural Areas	Urban Areas	All Areas	Rural Areas	Urban Areas
Primary Only	76.63	78.94	53.68	87.63	87.77	85.80
Primary with Upper Primary	68.82	76.03	39.29	84.05	83.88	85.18
Primary with Upper Primary & Secondary/ Hr. Secondary	26.72	34.74	14.40	91.75	90.36	94.68
Upper Primary Only	62.79	64.87	44.91	89.65	89.84	88.30
Upper Primary & Secondary/ Hr. Secondary	52.26	56.22	40.01	90.45	91.29	86.89
All Schools (2005-06)	**71.27**	**75.28**	**44.60**	**87.83**	**87.96**	**86.73**
All Schools (2004-05)	66.19	69.69	43.69	88.73	88.78	88.32
All Schools (2003-04)	69.83	73.84	46.00	88.77	88.73	89.13
All Schools (2002-03)	59.82	63.26	39.22	88.41	88.51	87.06
All Schools (2001-02)	42.28	45.62	21.20	90.21	90.17	90.48
Number of Schools Covered in 2005-06	**8,52,920**	**7,85,160**	**67,672**	–	–	–
Number of Schools Covered in 2004-05	6,88,634	6,31,914	56,399	–	–	–
Number of Schools Covered in 2003-04	7,24,682	6,65,872	57,287	–	–	–
Number of Schools Covered in 2002-03	5,57,217	5,13,390	42,398	–	–	–
Number of Schools Covered in 2001-02	3,60,892	3,38,787	19,079	–	–	–

* In the previous academic year.

It is further revealed that there are a number of other types of schools that are also using school buildings as shift schools. Compared to the Primary schools (2.29 percent), the percentage of other types of schools using school building as a shift school is comparatively high. About 5.68 percent Elementary schools used school building as a shift school, and 12.26 percent integrated Higher Secondary schools, 4.73 percent Upper Primary schools, and 8.24 percent Upper Primary attached to Secondary & Higher Secondary schools used school building as shift school. In Delhi, Chandigarh, Maharashtra, Madhya Pradesh, and Gujarat, in most of the school types the percentage of schools using building as a shift school is comparatively high. This is also true for Tripura, a state in the north-eastern region.

School Development Grant

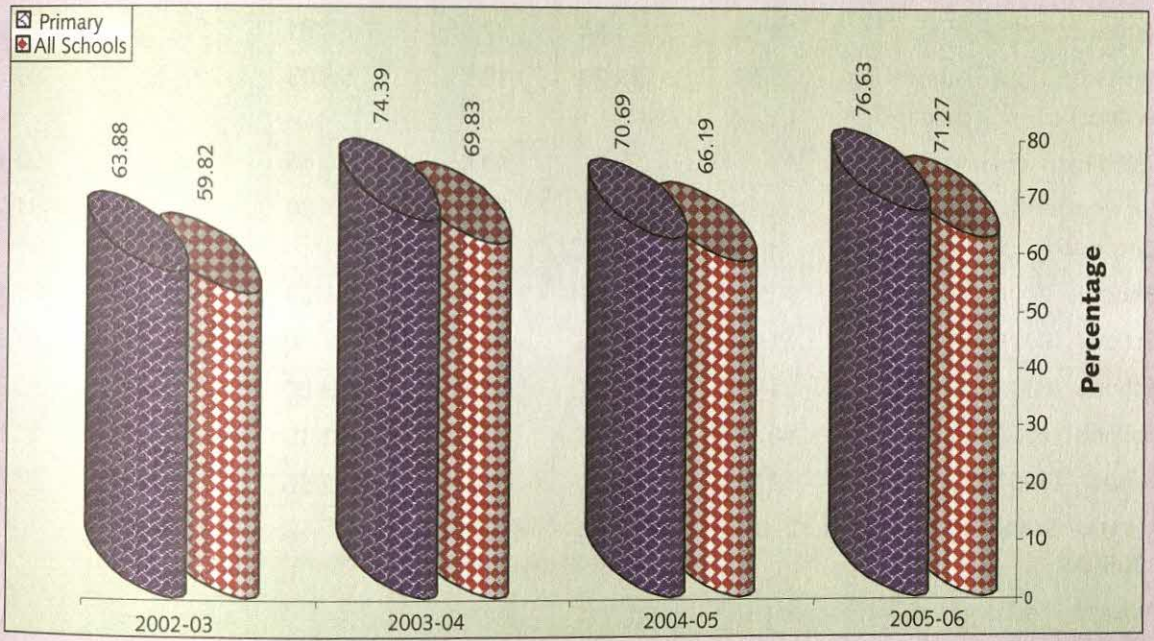
One of the important components of SSA is to provide school development and TLM grants to all government and aided schools. To examine the extent of schools that have received and utilized these grants, number of schools covered as well as percentage to total schools is presented at the all-India level.

Provisions have been made, under the SSA, to provide a lumpsum grant of Rs 2000/- per annum (now increased to Rs 5000/-) for school development to all schools that impart elementary education. Similarly, a provision of Rs 500/- per teacher per annum has also been made as TLM grant. A large number of schools received both of these grants during 2005-06. The utilization pattern suggests that the states have utilized around 90 percent of the funds allotted, both under the school development and TLM grants.

A marked increase in the number of schools that received school development grant may be noticed during the period from 2001-02 to 2005-06. Compared to 3,60,892 schools that received development grant in 2001-02, the corresponding figure in 2005-06 was as high as 8,52,920 schools (Table B24). Of the total schools that received school development grant, more than 92 percent are located in rural areas. Indeed the percentage of such schools has been much higher in rural areas (75.28 percent) than that in urban areas (44.60 percent). The state-specific percentage of schools (all categories) that received school development grant reveals that barring a few states, such as Kerala, Orissa and Tripura, more than 90 percent schools received development grant. About 83 percent schools in Bihar also received school development grant in 2005-06.

"Compared to 3,60,892 schools that received development grant in 2001-02, the corresponding figure in 2005-06 was as high as 8,52,920 schools"

Figure 2.38
Percentage Distribution of Schools Received School Development Grant



Besides Primary schools, all other school types have also received development grant during the previous year but percentage of such schools varied from one type of school to another. About 68.82 percent of the total independent Elementary schools received development grant compared to 26.72 percent integrated Higher Secondary, 62.79 percent independent Upper Primary and 52.26 percent Upper Primary attached to Secondary and Higher Secondary schools. Further, it is observed that about 77 percent of the total Primary schools received development grant in 2005-06, and that the percentage of Primary schools that received school development grant has been much higher in rural areas (78.94 percent) than in urban areas (53.68 percent). In a number of states, the percentage of such schools was found to be well above the all-India average (76.63 percent). In Bihar, Goa, Himachal Pradesh, Kerala, Maharashtra, Orissa, Rajasthan and Tripura, the percentage of Primary schools that received development grant was above 85 percent.

Table B26
Schools that Received and Utilized TLM Grant : 2006-07*

School Category	Grant Received			Grant Utilized		
	All Areas	Rural Areas	Urban Areas	All Areas	Rural Areas	Urban Areas
Primary Only	73.00	75.06	52.60	87.91	87.79	88.86
Primary with Upper Primary	66.48	73.58	37.40	87.81	86.98	91.86
Primary with Upper Primary & Secondary/ Hr. Secondary	25.37	33.20	13.35	90.03	93.12	83.76
Upper Primary Only	58.05	59.74	43.49	90.66	90.46	92.14
Upper Primary & Secondary/ Hr. Secondary	49.51	53.34	37.66	91.80	92.27	91.08
All Schools (2005-06)	**67.88**	**71.61**	**43.14**	**88.63**	**88.36**	**90.15**
All Schools (2004-05)	61.26	64.45	40.89	87.30	87.18	87.95
All Schools (2003-04)	61.81	65.11	42.50	93.00	92.94	93.39
All Schools (2002-03)	48.79	51.33	33.97	91.10	90.99	91.63
All Schools (2001-02)	33.70	36.50	16.44	92.56	92.34	94.55
Number of Schools Covered in 2005-06	**8,12,349**	**7,46,805**	**65,459**	–	–	–
Number of Schools Covered in 2004-05	6,88,634	6,31,914	56,399	–	–	–
Number of Schools Covered in 2003-04	6,41,519	5,87,184	52,927	–	–	–
Number of Schools Covered in 2002-03	5,54,511	4,16,562	36,720	–	–	–
Number of Schools Covered in 2001-02	2,87,683	2,71,074	14,797	–	–	–

* In the previous academic year.

Teaching-Learning Material (TLM) Grant

Like school development grant, the number of schools that received TLM grant over a period of time from 2002-03 to 2005-06 also increased significantly. However, the number of schools that received TLM grant has been a bit lower than the number of schools that received development grant (Table B25). The number of schools that received TLM grant was 8,12,349, that is, 67.88 percent of all types of schools that impart Elementary education in the country. Further, the percentage of schools that received TLM grant in 2005-06 has been much lower in urban areas (43.14 percent) than in rural areas (71.61 percent). About 95 percent schools in Orissa received TLM grant which is also the highest amongst all the states, the lowest being 21.89 percent in Arunachal Pradesh. The percentage of such schools is also high at 86 percent in Kerala and Tripura and 84.49 percent in Himachal Pradesh.

Figure 2.39

Percentage Distribution of Schools Received School Development Grant : All States

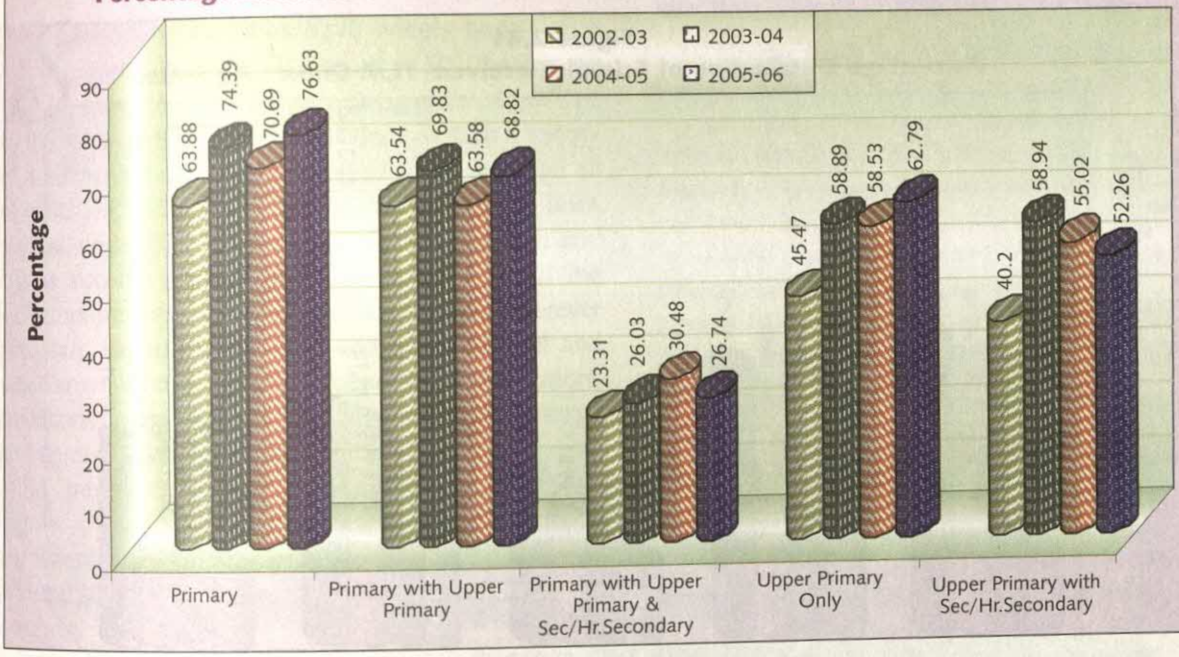
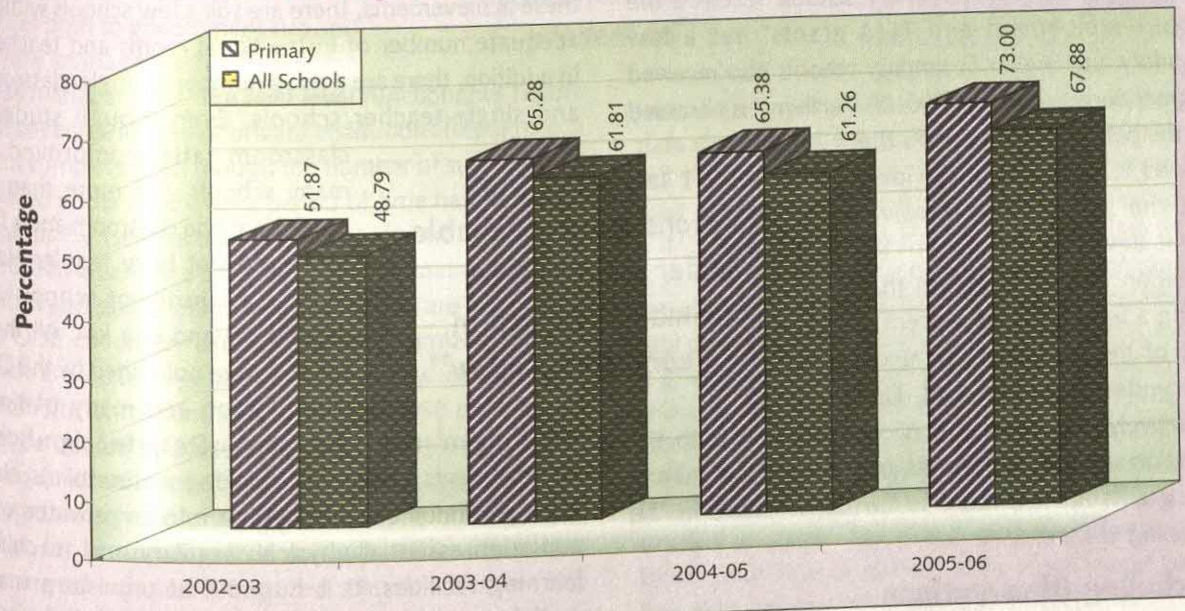


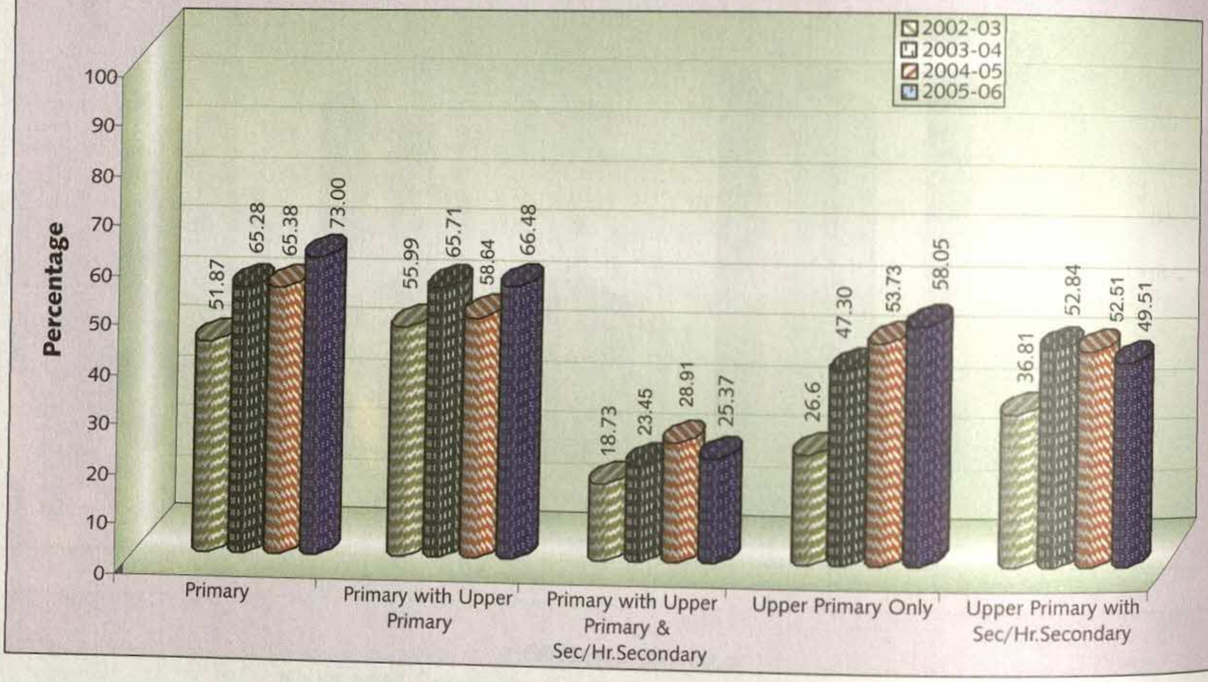
Figure 2.40

Percentage Distribution of Schools Received TLM Grant



About 5,69,044 Primary schools, that is, 73.00 percent of the total schools, received TLM grant in 2005-06. Against 75.06 percent Primary schools in rural areas, the corresponding percentage of schools receiving TLM grant in urban areas has been only 52.60. About 66.48 percent Elementary schools also received TLM grant. Not only Primary and Upper Primary schools received the school development and TLM grants, but a few Secondary and Higher Secondary schools also received the grant during the year 2005-06. Further, it is observed that the percentage of schools that received TLM grant has been lower than the schools that received school development grant. The utilization pattern suggests that, barring a few states, 88 percent or more of the grant received under school development and TLM respectively was utilized. It is expected that both the allocation and utilization under school development and TLM grants are expected to further improve in the remaining years of SSA.

Figure 2.41
Percentage Distribution of Schools Received TLM Grant : All States



Concluding Observations

School-related indicators presented above clearly show that the number of schools imparting Elementary education has increased significantly over a period of time. More Primary and Upper Primary schooling facilities are available now. However, it does not necessarily mean that every school has minimum essential facilities. This is reflected in a variety of facility indicators presented above. Though majority of schools have buildings and adequate number of instructional rooms, yet despite all these achievements, there are still a few schools without adequate number of instructional rooms and teachers. In addition, there are a good number of single-classroom and single-teacher schools. Even though student-classroom ratio is improved, in many schools, still more than 60 pupils sit in one classroom and a few others do not have regular Head Master. Majority of schools are located beyond one km. All these schools were not visited by the CRC Coordinator, and many of these were even not inspected. Despite significant improvements in schools (drinking water, toilets etc.), still a good number of schools are to be provided with minimum essential physical, ancillary and teaching-learning facilities. It is hoped that provisions made available under SSA will be optimally utilized in the years that follow and all schools imparting Elementary education across the country will be provided both developmental as well as TLM grants.

> "It is hoped that provisions made available under SSA will be optimally utilized in the years that follow"

Enrolment-Based Indicators

Introduction

Schooling facilities have widely been made available across the country. Still there is no guarantee that they are being optimally utilized by the respective clientele population. As such a variety of enrolment-based indicators need to be analysed all of which, like school and facility indicators, have been covered under DISE in case of each of the 35 States and UTs as also the average of all the states. Most of the indicators are presented by school category and wherever necessary, separately for boys and girls and rural and urban areas. While analysing enrolment-based indicators, limitations presented in Section I with respect to coverage and consistency of data be kept in mind, because these limitations require crucial indicators such as enrolment ratio, survival, retention and transition rates to be analysed carefully.

> "Based on *Student Flow Analysis,* a detailed section is devoted on retaining capacity of the system and indicators, such as average repetition, promotion and dropout rates have been presented"

DISE mandate is to collect data only from recognized schools that impart elementary education irrespective of the school type. It applies both to government run and private managed schools. Within these managements, the field level functionaries report that coverage in case of private institutions (recognized) is not complete even though the number of such schools covered under DISE over a period of time has increased significantly (see Section I). It may also be noted that Education Guarantee Schools (EGS), alternative learning centres and similar other types of schools are not part of the DISE coverage, as also the unrecognized schools which are quite large in number. In view of the these limitations, enrolment ratio based on DISE data can at best be treated by presenting data on 6-11/11-14 year group children enrolled in formal Grades I-V/VI-VIII in recognized schools only. The rest of the children may either be in unrecognized schools, EGS, alternative learning schools and recognized schools which are not covered under DISE. A few of these children may either be termed as out-of-school, never enrolled or dropout children. Unless all such schools are also considered, a true picture of universalisation of elementary education cannot be known. More specifically, the following indicators have been analysed:

Gender Parity Index (GPI) in case of enrolment in Primary and Upper Primary classes; share of enrolment in rural areas; percentage of enrolment in government schools; enrolment percentage of SC, ST, OBC and Muslims with respect to total enrolment; percentage of enrolment of children with disability; percent share of pre-primary enrolment; percentage of enrolment in single-teacher schools; percentage of enrolment in schools having 60 and more students in a classroom; percentage of over-age and under-age children; average enrolment by school category etc.

An attempt has also been made to compute indicators of internal efficiency in case of all the 35 States and UTs (input/output ratio, average number of years the system is taking to produce a primary graduate and wastage ratio). Based on *Student Flow Analysis*, a detailed section is devoted on retaining capacity of the system which is based on DISE data for 2005-06 and 2006-07 and indicators, such as average repetition, promotion and dropout rates have been presented. Further, with state-specific data available for only 3 years', it is not possible to work out retention rate which needs enrolment data for at least over a period of five years. Since those districts in a state that have grade-specific enrolment data for over a period of five years are considered in estimating the retention rate at the Primary level, as such the retention rate presented does not represent the status as a whole; it gives only a fairly good amount of information about retaining capacity of the education system in the state. Alternatively, Apparent Survival Rate worked out in case of Primary level also presents a part of enrolment in Grade II and subsequent grades in relation to the enrolment in Grade I in a year. The rate is considered crude as it is based upon the enrolment data of only one year. It, however, reveals interesting and useful information about retaining capacity of the system. In addition, transition rate from Primary to Upper Primary level of education has also been presented.

Participation of Girls

Gender Parity Index

Gender Parity Index (GPI) and percentage of girls' enrolment in Primary and Upper Primary classes presented for the period 2003-04 to 2006-07 reveal that there is consistent improvement in GPI (Table C1) and girls' share in enrolment (Table C2). In a number of states, improvement in GPI in Primary enrolment has been quite impressive in comparison to enrolment in the Upper Primary during the same period.

The average of 35 states in 2006-07 indicates a GPI of 0.93 in Primary classes and 0.87 in case of enrolment in Upper Primary classes. The respective figures in 2005-06 were 0.92 and 0.84. All elementary classes together had a GPI of 0.91 in 2006-07 compared to 0.90 in 2005-06. No significant difference is noticed in GPI in Primary enrolment in case of rural areas (0.93) and in urban areas (0.92). Further, a significant difference is observed in GPI in Primary enrolment in case of all government (0.96) and all private managements (0.81), the corresponding figures in case of Upper Primary enrolment being 0.90 and 0.82. GPI in case of total Elementary enrolment in rural areas (0.91) has been slightly lower than that in urban areas (0.92). All government managements together have much higher GPI (0.95) as compared to GPI in case of all private managements together (0.82) (Table C1). The analysis presented above clearly indicates that boys outnumber girls both at the Primary and Upper Primary levels of education. This is

Table C1

Gender Parity Index (GPI) in Enrolment : 2003-04 and 2006-07

Grades	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
2003-04					
I-V	0.90	0.90	0.93	0.93	0.81
VI-VII/VIII	0.82	0.79	0.93	0.83	0.81
I-VII/VIII	**0.88**	**0.87**	**0.93**	**0.91**	**0.81**
2004-05					
I-V	0.91	0.90	0.92	0.93	0.72
VI-VII/VIII	0.83	0.80	0.91	0.85	0.70
I-VII/VIII	**0.89**	**0.88**	**0.92**	**0.91**	**0.71**
2005-06					
I-V	0.92	0.91	0.92	0.95	0.80
VI-VII/VIII	0.84	0.82	0.91	0.87	0.81
I-VII/VIII	**0.90**	**0.89**	**0.92**	**0.93**	**0.80**
2006-07					
I-V	0.93	0.93	0.92	0.96	0.81
VI-VII/VIII	0.87	0.85	0.92	0.90	0.82
I-VII/VIII	**0.91**	**0.91**	**0.92**	**0.95**	**0.82**

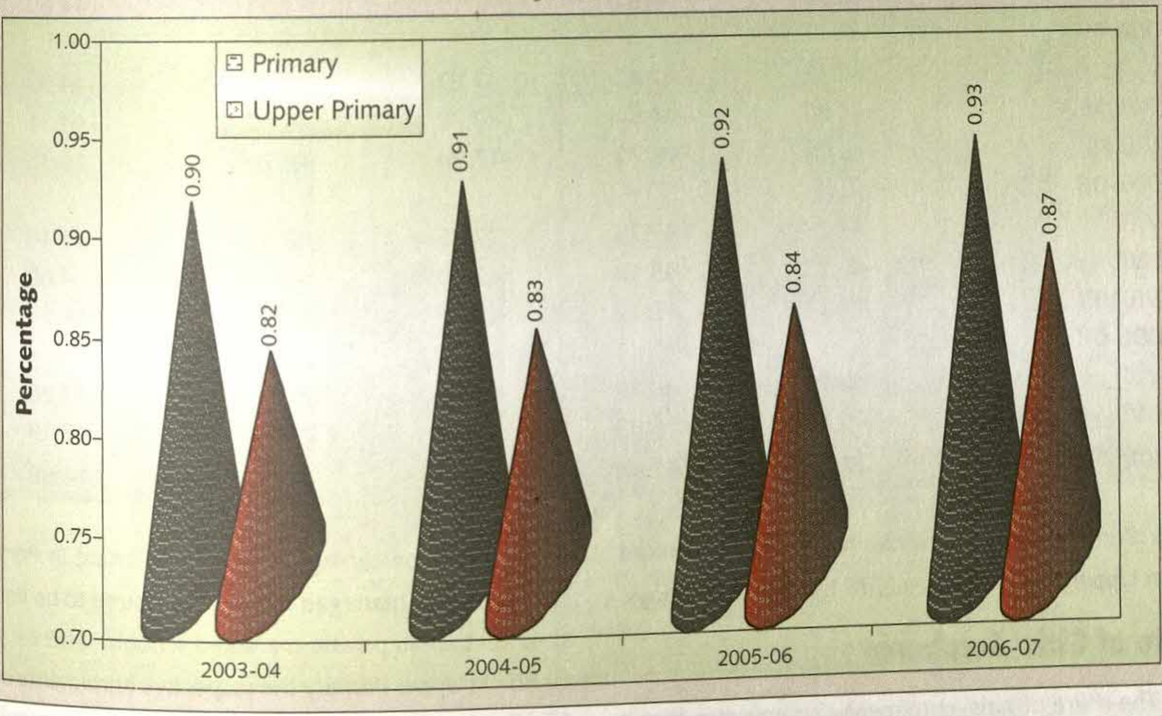
> "All elementary classes together had a GPI of 0.91 in 2006-07 compared to 0.90 in 2005-06. No significant difference is noticed in GPI in Primary enrolment in case of rural areas and in urban areas"

also reflected in the share of girls' enrolment presented in Table C2, indicating less number of girls in Upper Primary classes than in Primary classes which means serious implications for UEE.

> "GPI in Bihar, Chandigarh, Jammu & Kashmir, Gujarat, Punjab and Rajasthan is a little low in Primary enrolment, indicating that the goal of UPE in these states is not likely to be realised unless all remaining girls are brought under the education system"

Further analysis of state-specific GPI in Primary enrolment indicates that the index remained above 0.95 in 14 states. Meghalaya has the highest GPI of above 1. Among the rest of the states, Manipur and Sikkim have the highest GPI of 0.99, and Bihar the lowest (0.85) amongst major states. Andhra Pradesh, Kerala and West Bengal have GPI of 0.97; almost the same number of boys and girls in these states are enrolled in Primary classes. The national capital of Delhi reported a GPI of 0.88 in both Primary and Upper Primary enrolment. Kerala too has a high GPI in case of Upper Primary enrolment (0.93). Meghalaya is the only state in the country which reported a GPI of above one both in Primary as well as in Upper Primary enrolment. Lakshadweep and Sikkim too reported GPI above one in Upper Primary enrolment. It is observed that GPI in Primary enrolment in the states of Assam (0.97), Chhattisgarh (0.96), Haryana (0.90), Himachal Pradesh (0.90), Karnataka (0.94), Maharashtra (0.90), Madhya Pradesh (0.95), Orissa (0.91), Tamil Nadu (0.94) and Uttar Pradesh (0.96) has also been very high. All the states in the north-eastern region also had a very high GPI in case of enrolment in Primary classes.

Figure 3.1
Gender Parity Index in Enrolment



On the other hand, GPI in the states of Bihar (0.85 against 0.80 in 2005-06), Chandigarh (0.80), Jammu & Kashmir (0.86), Gujarat (0.88), Punjab (0.85) and Rajasthan (0.88) was a little low in Primary enrolment, indicating that the goal of UPE in these states is not likely to be realised unless all remaining girls are brought under the education system. This is also true for Upper Primary enrolment. Rajasthan has the lowest GPI in 2006-07 (0.66 against 0.62 in 2005-06) in Upper Primary enrolment, which indicates that only 66 girls are enrolled against 100 boys. Bihar (0.71), Dadra & Nagar Haveli (0.71), Gujarat (0.81), Jammu & Kashmir (0.81), Jharkhand (0.83) and Madhya Pradesh (0.82) too have a very low GPI, which clearly indicates that a large number of girls in these states are still out of school. All the north-eastern states showed a high GPI in case of Upper Primary enrolment also. Meghalaya had more girls in Upper Primary classes (GPI 1.10) than the boys.

Share of Girls' Enrolment

The share of girls' enrolment also indicates that it is lower than the share of boys' enrolment, both at Primary (48.09 percent) and Upper Primary (46.51 percent) levels of education. Only a little improvement in the girls' share in the total enrolment in Primary and Upper Primary classes is observed during 2005-06 and 2006-07 (Table C2). The share of girls' enrolment in Primary classes in 2005-06 is 48.09 percent compared to 47.79 percent in the previous year. Girls share in the total enrolment in Upper Primary classes has been 46.51 percent; it was 45.80 percent in 2005-06. Girls' share in Upper Primary enrolment was found to be lower in rural areas (46.08 percent) than the same in urban areas (47.82 percent). The same is also true in case of enrolment in the Elementary classes, that is, Classes I-VII/VIII (rural 47.64 and urban 47.82 percent).

Table C2

Percentage of Girls' Enrolment : 2003-04 to 2006-07

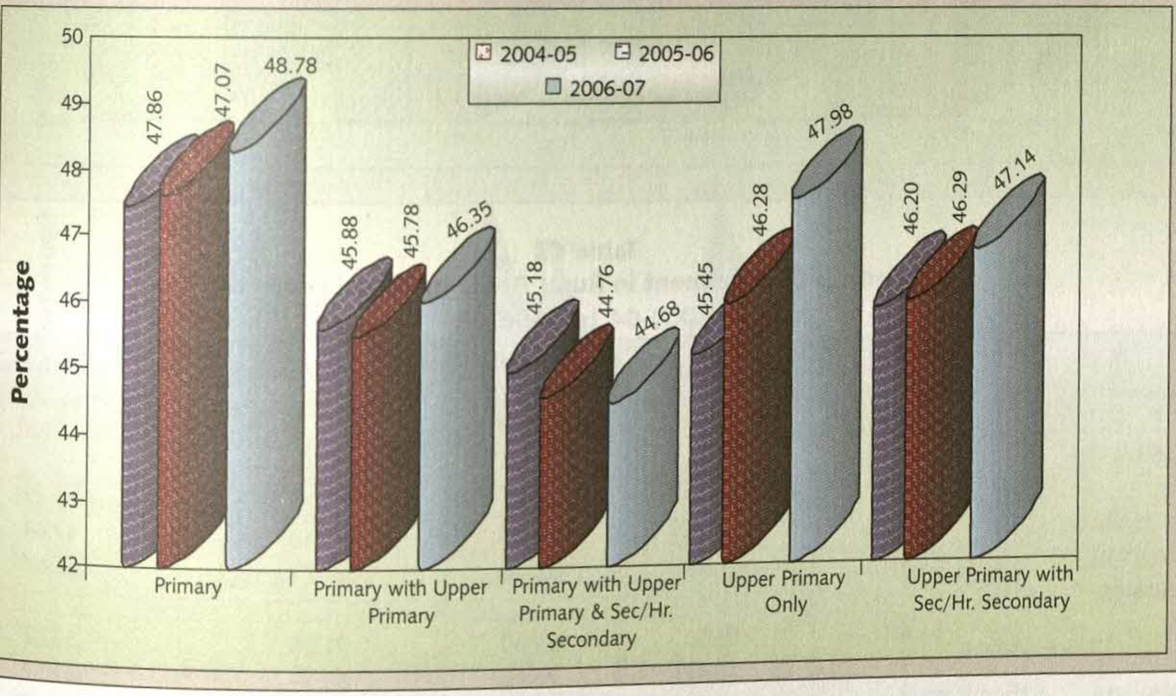
Grades	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
2003-04					
I-V	47.47	47.31	48.22	48.07	44.71
VI-VII/VIII	45.02	44.03	48.12	45.21	44.64
I-VII/VIII	**46.90**	**4.61**	**48.19**	**47.51**	**44.69**
2004-05					
I-V	47.52	47.45	47.87	48.27	44.37
VI-VII/VIII	45.32	44.54	47.78	45.82	44.31
I-VII/VIII	**46.99**	**46.79**	**47.84**	**47.76**	**44.35**
2005-06					
I-V	47.79	47.75	47.95	48.57	44.46
VI-VII/VIII	45.80	45.17	47.70	46.49	44.65
I-VII/VIII	**47.27**	**47.12**	**47.87**	**48.20**	**44.53**
2006-07					
I-V	48.09	48.16	47.82	49.09	44.86
VI-VII/VIII	46.51	46.08	47.82	47.38	45.19
I-VII/VIII	**47.67**	**47.64**	**47.82**	**48.71**	**44.98**

Further, percentage of girls' enrolment in Primary in government managed schools was found to be higher at 49.09 than in private managed schools, where it was 44.86. In Upper Primary the respective enrolments were 47.38 percent and 45.19 percent and in Elementary 48.71 percent and 44.98 percent (Table C2). It is observed that except in Bihar, Chandigarh, and Punjab in all other states the share of girls' enrolment at the Primary level has been above 46 percent. In Bihar, it was only 45.89 percent at Primary level and at Upper Primary level it was 41.66 percent. The share of girls' enrolment in Chandigarh is also low at 44.58 percent in Primary and 45.19 percent in Upper Primary classes. Likewise, national capital of Delhi (46.73 percent),

> “It is observed that except in Bihar, Chandigarh, and Punjab, in all other states the share of girls' enrolment at the Primary level has been above 46 percent. In Bihar, it was 45.89 percent at Primary level and at Upper Primary level, it was 41.66 percent”

Jammu & Kashmir (46.15 percent), Punjab (45.87 percent) and Rajasthan (46.78 percent) too had a lower percentage of girls' enrolment at Primary level. It again reiterates that without bringing all girls under the education system, the goal of UPE is not likely to be achieved in the near future. This is also reflected in the over-all Elementary enrolment (Bihar 45.17 percent; Jammu & Kashmir 45.69 percent; Punjab 45.94 percent and Rajasthan 44.95 percent). The highest share of girls' enrolment at Primary level is noticed in case of Meghalaya (50.44 percent) followed by Manipur (49.84 percent), Kerala (49.46 percent) and West Bengal (49.30 percent). A few other states also reported above 49 percent girl's enrolment in Primary classes.

Figure 3.2
Percentage of Girls Enrolment to Total Enrolment : All States



Enrolment in Rural Areas

The percentage of enrolment in rural areas reveals that it is lower when considered with respect to share of the total number of schools in these areas. Of the total 1.20 million schools that impart elementary education in the country, 87.15 percent are located in rural areas whereas percentage of enrolment in rural areas in elementary classes that is, Classes I-VII/VIII, is 79.65. All government schools together had enrolment percentage as high as 88.76 compared to only 56.34 in case of private management schools (TableC3) The corresponding share of government and private schools to total schools was 81.14 and 18.86 percent respectively. In a few states, the percentage of elementary enrolment in rural areas with respect to total enrolment has been even higher than 90. Assam (91.65 percent), Bihar (93.09 percent), Himachal Pradesh (90.32 percent), Jharkhand (90.71 percent) and Lakshadweep (97.38 percent) are such states. On the other hand, Chandigarh (20.58 percent), Delhi (23.02 percent), Karnataka (67.87 percent), Maharashtra (59.79 percent), Mizoram (59.21 percent), Nagaland (70.54 percent), Puducherry (44.27 percent) and Tamil Nadu (68.62 percent) showed lower percentages of enrolment in rural areas. The percentage in Kerala was about 83.

Figure 3.3
Percentage of Girls Enrolment in Primary & Upper Primary Classes : All States

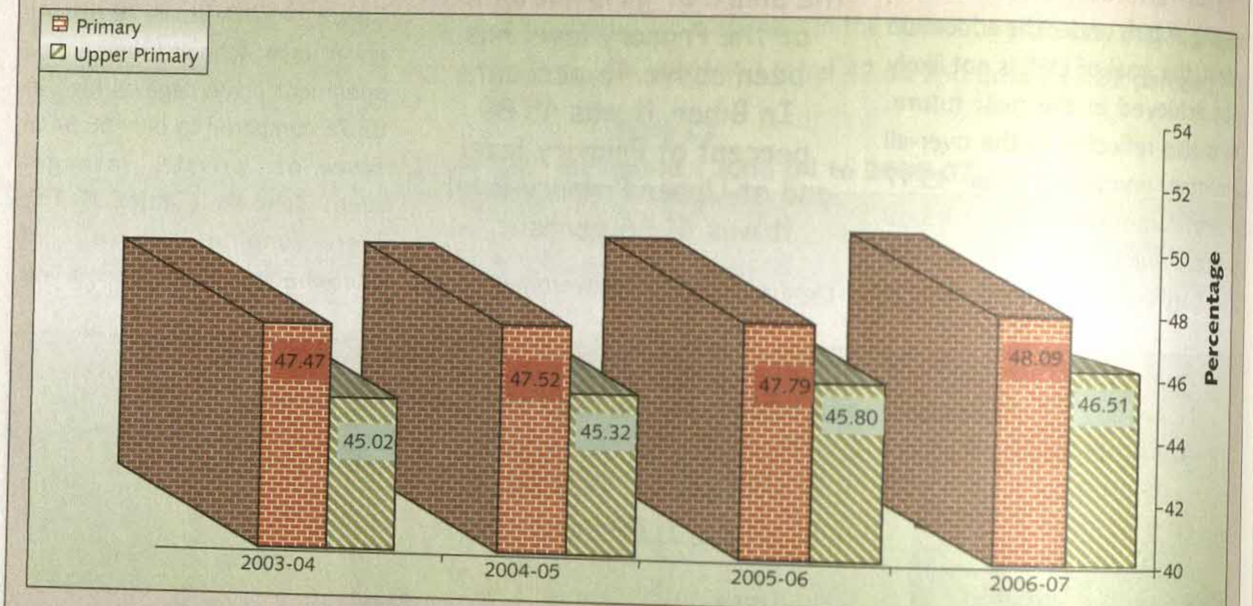


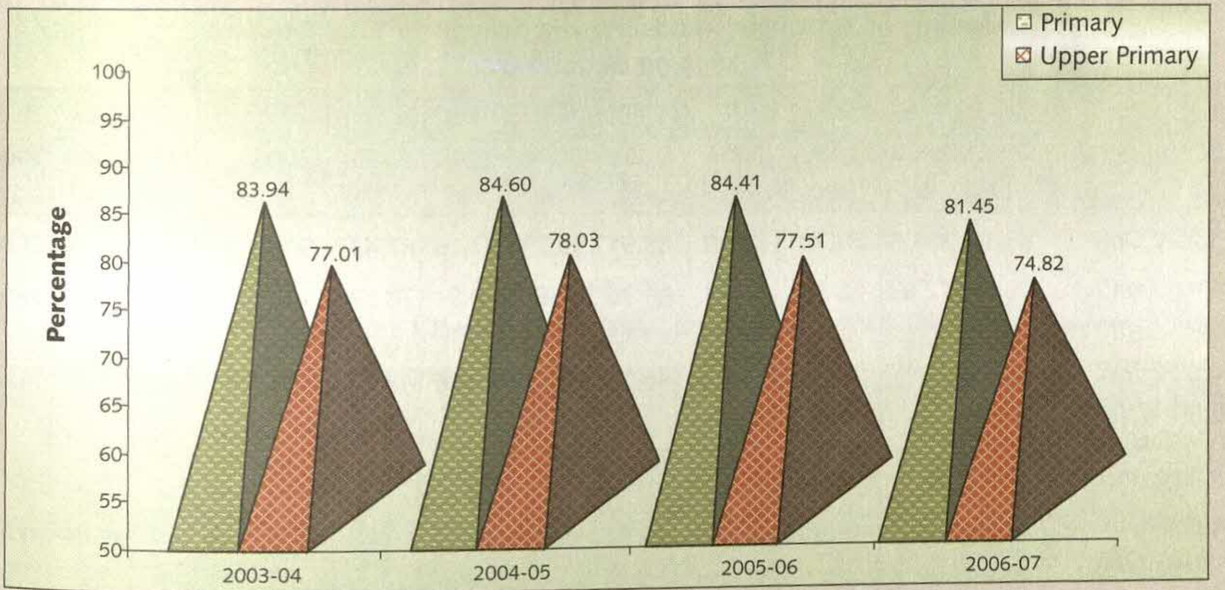
Table C3
Percentage of Enrolment in Rural Areas to Total Enrolment
2003-04 to 2006-07

Classes	All Category Schools			All Government Managements	All Private Managements
	Boys	Girls	Total		
2003-04					
I-V	84.14	83.71	83.94	90.70	53.49
VI-VII/VIII	78.44	75.21	77.01	85.48	61.04
I-VII/VIII	**82.87**	**81.99**	**82.46**	**89.77**	**56.07**
2004-05					
I-V	84.69	84.50	84.60	91.08	55.97
VI-VII/VIII	79.14	76.67	78.03	86.34	61.57
I-VII/VIII	**83.41**	**82.84**	**83.15**	**90.19**	**57.88**
2005-06					
I-V	84.46	84.36	84.41	91.57	57.56
VI-VII/VIII	78.42	76.42	77.51	87.41	61.74
I-VII/VIII	**82.96**	**82.52**	**82.75**	**90.75**	**59.10**
2006-07					
I-V	81.35	81.56	81.45	89.75	54.83
VI-VII/VIII	75.43	74.12	74.82	85.29	58.87
I-VII/VIII	**79.75**	**79.64**	**79.69**	**88.76**	**56.34**

It is observed that enrolment in case of all government management schools in Himachal Pradesh, Lakshadweep and Uttar Pradesh in rural areas was more than 95 percent as compared to only 26.76 percent in Delhi and 29.48 percent in Chandigarh. On the other hand, about 94 percent elementary enrolment in Assam was located in rural areas in case of private managements compared to only 3.01 percent in Chandigarh and 15.53 percent in Delhi.

Though, about 91 percent of the total Primary schools are located in rural areas, the total enrolment in Primary classes is 81.45 percent in rural areas schools. The percentage of boys' and girls' enrolment in rural areas in Primary classes has been 81.35 and 81.56 percent respectively. The percentage of enrolment in government schools was as high as 90 compared to only 55 in schools located in rural areas under private managements.

Figure 3.4
Percentage Enrolment in Primary & Upper Primary Classes in Rural Areas to Total Enrolment : All States



Total rural enrolment in Primary classes in Bihar was 94 percent, in Assam 93 percent, Himachal Pradesh 91 percent, Jharkhand 92 percent, Lakshadweep 96 percent, and in Uttar Pradesh 90 percent, i.e. above 90 percent. The lowest enrolment in rural areas was observed to be in case of Chandigarh (23.49 percent). The enrolment in rural areas in Delhi was 22.89 percent, Puducherry - 43.52 percent, Mizoram - 60.45 percent, Tamil Nadu - 70.01 percent, Andhra Pradesh - 71.92 percent, Nagaland - 73.20 percent and Madhya Pradesh - 79.89 percent.

Percentage share of Upper Primary enrolment in rural areas (74.82 percent) has been much lower than the share of enrolment in Primary classes (81.45 percent). The highest percentage is observed in case of Lakshadweep (98.78 percent), followed by Himachal Pradesh (89.28). The lowest, 15.21, is in Chandigarh, followed by Delhi (23.26), Puducherry (45.47), Maharashtra (58.42), Tamil Nadu (66.26), Andhra Pradesh (68.48), and Arunachal Pradesh (73.94). Kerala has 80.55 percent Upper Primary enrolment in the rural areas. All government schools together have 85.29 percent enrolment (87.41 percent in 2005-06) of the total Upper Primary schools located in rural areas in 2006-07 compared to 58.87 percent (61.74 percent in 2005-06) in case of all private schools.

Enrolment in Government Schools

As already mentioned, majority of schools imparting elementary education (81.14 percent) are government owned schools. Further, irrespective of the type of school, the percentage share of enrolment in government schools has been lower when their share in the number of schools are considered. This indicates that enrolment in schools run by private managements has been a bit higher than their share in the number of schools.

It is observed that about seven out of ten students in elementary classes are from the government schools.

However, integrated Higher Secondary schools (28.92 percent) and Upper Primary attached to Secondary & Higher Secondary (42.15 percent) schools have fewer students in government schools. All government schools together had 70.02 percent of the total elementary enrolment. The analysis also reveals significant difference in elementary enrolment under government managements in rural (78.56 percent) and urban areas (36.49 percent) (Table C4). In urban areas, it seems that majority of elementary enrolment is in the private managed schools. The percentage of enrolment in government managed integrated Higher Secondary schools located in urban areas is as low as 14.60 compared to 26.15 percent in case of Upper Primary attached to Secondary and Higher Secondary schools. Further, it is observed that in Bihar, Jharkhand, Orissa and Tripura, more than 90 percent enrolment comes from government managed schools. On the other hand, the percentage of such elementary enrolment in Tamil Nadu has been low at 50.95 and in Kerala 35.88 compared to 61.01 in Delhi and 48.63 in Puducherry. The low percentage in Kerala indicates that about 64 percent elementary enrolment comes from the privately management schools.

> "Majority of schools imparting elementary education are government owned schools. Irrespective of the type of school, the percentage share of enrolment in government schools has been lower when their share in the number of schools are considered"

About 88 percent Primary schools in 2006-07 were under government managements but enrolment in them was only 82.50 percent. The state-specific share of Primary enrolment in government managed schools reveals that majority of states had the percentage share above 90. However, Andhra Pradesh (62.74 percent), Kerala (36.44 percent), Maharashtra (61.67 percent), Meghalaya (50.23 percent) and Tamil Nadu (57.95 percent) had much lower percentage than the all-India average of 82.50 percent. On the other hand, about 76 percent of the total independent Upper Primary schools had been under government managements but having only 62.84 percent of the total enrolment in such schools.

Table C4

Percentage of Enrolment in Government Schools to Total Enrolment 2003-04 to 2006-07

School Category	All Areas				Rural Areas				Urban Areas			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	85.35	85.03	82.78	82.50	89.91	89.29	87.16	87.43	50.40	51.48	48.14	51.04
Primary with Upper Primary	72.67	72.83	69.30	68.43	81.30	81.66	78.81	78.27	44.34	41.74	36.94	36.53
Primary with Upper Primary & Secondary/ Hr. Secondary	30.15	26.38	29.92	28.92	46.25	39.75	42.86	42.76	13.41	12.32	13.36	14.60
Upper Primary Only	72.96	72.81	66.95	62.84	75.42	75.29	72.10	69.78	49.57	49.49	34.04	31.10
Upper Primary & Secondary/ Hr. Secondary	46.53	50.03	38.20	42.15	52.98	56.49	45.36	48.84	31.66	33.34	22.15	26.15
All Schools	**76.60**	**76.30**	**72.61**	**70.02**	**83.66**	**83.16**	**80.02**	**78.56**	**42.12**	**41.48**	**36.44**	**36.49**

This is also true for government managed Elementary schools in which significant difference is noticed in percentage share of schools (72 percent) and enrolment (68.43 percent). Similarly, the share in numbers of integrated Higher Secondary schools having government managements has been only 47 percent with 28.92 percent enrolment. The difference between the share of schools and enrolment is also noticed in the case of government-run Upper Primary schools attached to Secondary and Higher Secondary schools.

Figure 3.5
Percentage Enrolment in Government Schools: All States

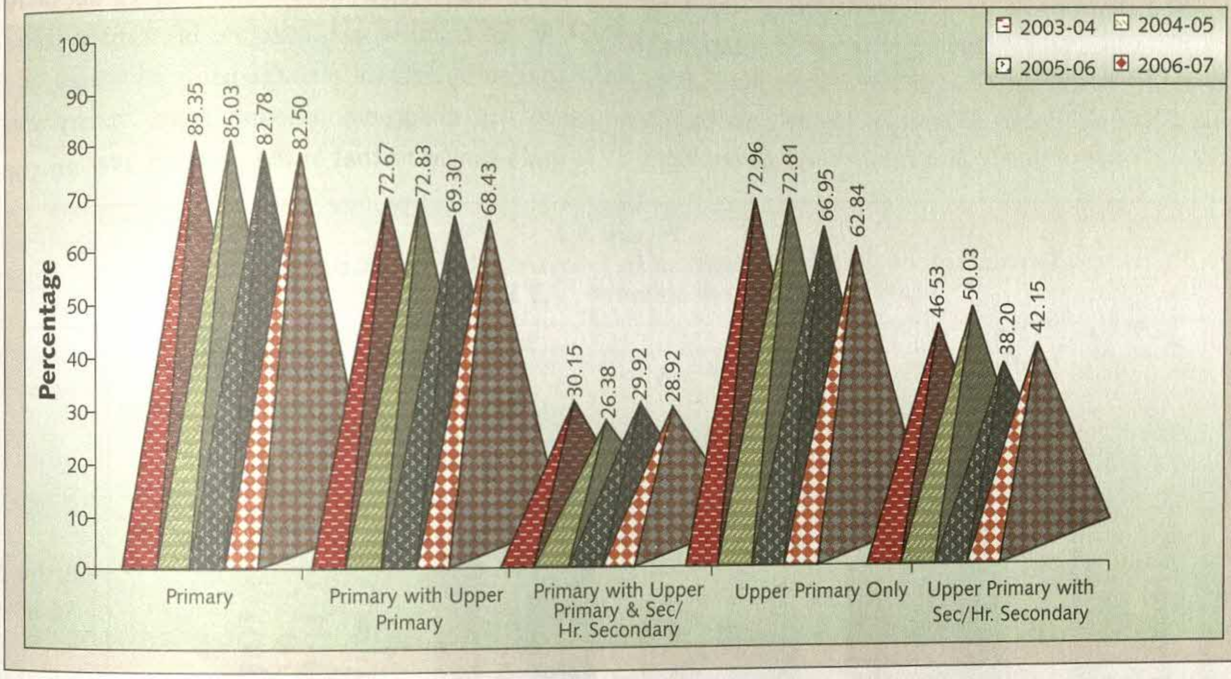


Table C5
Percentage of SC & ST Enrolment to Total Enrolment : 2005-06 & 2006-07

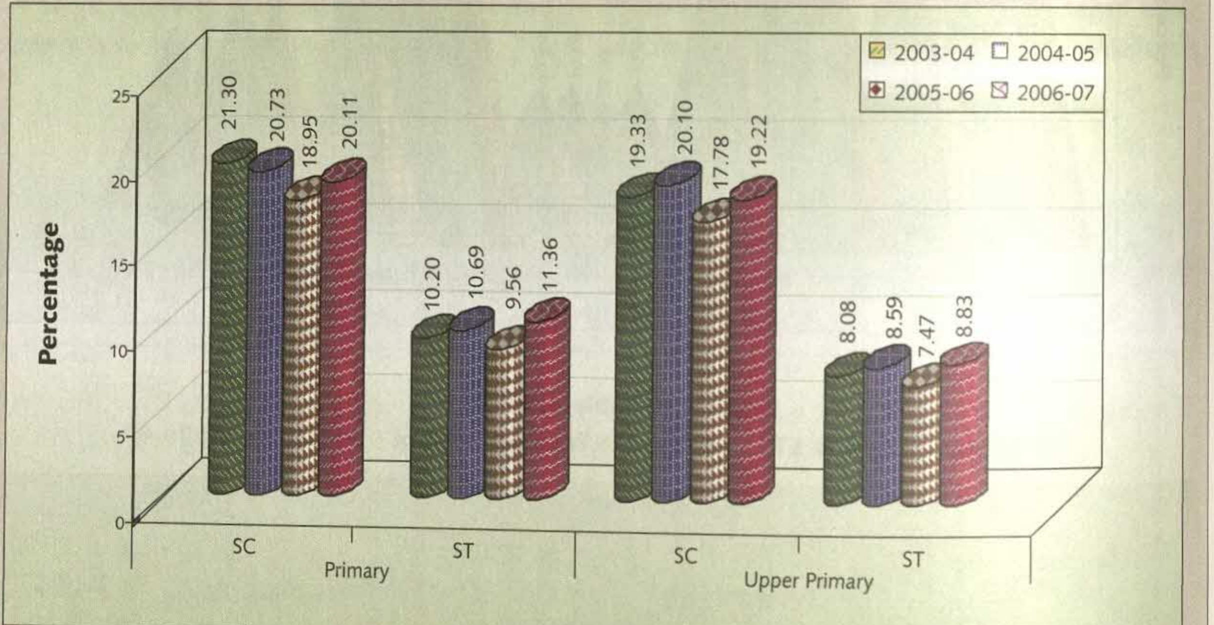
Grades	SC Enrolment		ST Enrolment	
	Percentage	%age of SC Girls to Total SC Enrolment	Percentage	%age of ST Girls to Total ST Enrolment
Share as per 2001 Census	16.20	–	8.20	–
2005-06				
I-V	18.95	47.51	9.56	47.56
VI-VII/VIII	17.78	45.40	7.47	43.93
I-VII/VIII	**18.64**	**46.99**	**9.02**	**46.77**
2006-07				
I-V	20.11	48.01	11.36	47.98
VI-VII/VIII	19.22	46.15	8.83	44.58
I-VII/VIII	**19.87**	**47.53**	**10.69**	**47.24**

Share of SC, ST, OBC and Minority Enrolment

SC and ST Enrolment

The share of SC and ST enrolment in the total enrolment in Primary, Upper Primary and Elementary classes reveals a slight increase during the period 2005-06 and 2006-07 (Tables C5 and C6). Notably, at all levels (Primary, Upper Primary and Elementary) government has been the main provider and caterer of the educational needs of both the SC and ST children (Table C6). Percentage in case of SC enrolment in Primary classes in 2006-07 was as high as 82.34. Schools under Private managements had only 17.66 percent of the total SC Primary enrolment, and only 12.64 percent in case of Upper Primary. However, the percentage of ST enrolment under Private managements has been much higher both in case of Primary (32.65) and Upper Primary (25.51) levels. In 2006-07, both SC and ST enrolment together had a share of 78.50 percent and 84.55 percent respectively at Primary and Upper Primary levels of education under Government managements. This otherwise also reveals that only 22 out of 100 SC & ST children are enrolled in Primary schools managed by Private managements compared to 15 out of 100 children enrolled in Upper Primary which is quite similar to that in the previous year.

Figure 3.6
Percentage of SC & ST Enrolment in Primary & Upper Primary Classes to Total Enrolment : All States



> "At all levels, Government has been the main provider and caterer of the educational needs of both the SC and ST children. Percentage in case of SC enrolment in Primary classes was as high as 82.34"

As against 18.64 percent in 2005-06, SC enrolment in Classes I–VII/VIII increased to 19.87 in 2006-07. The corresponding percentages were 9.02 and 10.69 respectively in 2005-06 and 2006-07 in case of ST enrolment in elementary classes. At the Primary level, the share of SC and ST enrolment with respect to total enrolment in 2006-07 works out to be 20.11 percent and 11.36 percent (18.95 and 9.56 percent in 2005-06), respectively which is higher than their percent share in total population. The share of SC and ST population as per 2001 Census at the all-India level was 16.20 percent and 8.20 percent respectively. Their corresponding percentages at the Upper Primary level in 2006-07 are 19.22 (17.78 in 2005-06) and 8.83 (7.47 in 2005-06) which are lower than the same in case of Primary enrolment. Three states from the north-eastern region, namely Meghalaya (92.42 percent), Mizoram (97.53 percent) and Nagaland (93.88 percent) have

Table C6

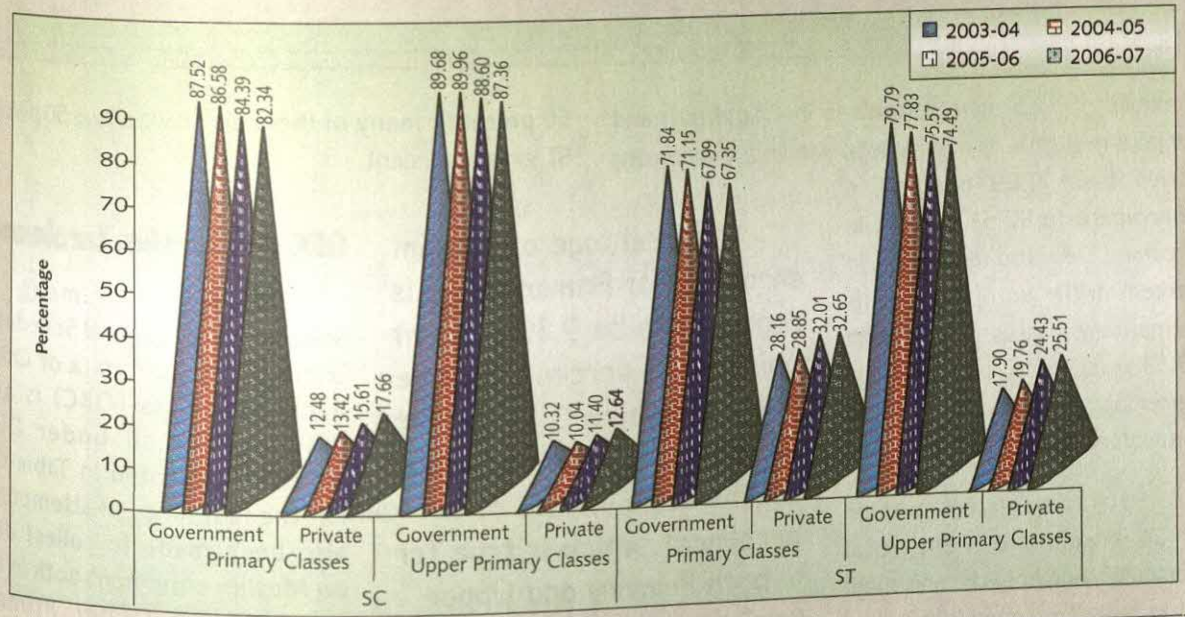
Share of SC & ST Enrolment in Government Management and Private Management Schools : 2002-03 to 2006-07

(In Percentage)

Grades	SC Enrolment		ST Enrolment		SC & ST Enrolment	
	Government Managements	Private Managements	Government Managements	Private Managements	Government Managements	Private Managements
2002-03						
I-V	87.74	12.26	73.66	26.34	84.71	15.29
VI-VII/VIII	**91.71**	**8.29**	**81.16**	**16.77**	**89.86**	**10.14**
2003-04						
I-V	87.52	12.48	71.84	28.16	84.16	15.84
VI-VII/VIII	**89.68**	**10.32**	**79.79**	**17.90**	**87.78**	**12.22**
2004-05						
I-V	86.58	13.42	71.15	28.85	82.94	17.06
VI-VII/VIII	**89.96**	**10.04**	**77.83**	**19.76**	**87.49**	**12.51**
2005-06						
I-V	84.39	15.61	67.99	32.01	80.34	19.66
VI-VII/VIII	**88.60**	**11.40**	**75.57**	**24.43**	**85.80**	**14.20**
2006-07						
I-V	82.34	17.66	67.35	32.65	78.50	21.50
VI-VII/VIII	**87.36**	**12.64**	**74.49**	**25.51**	**84.55**	**15.45**

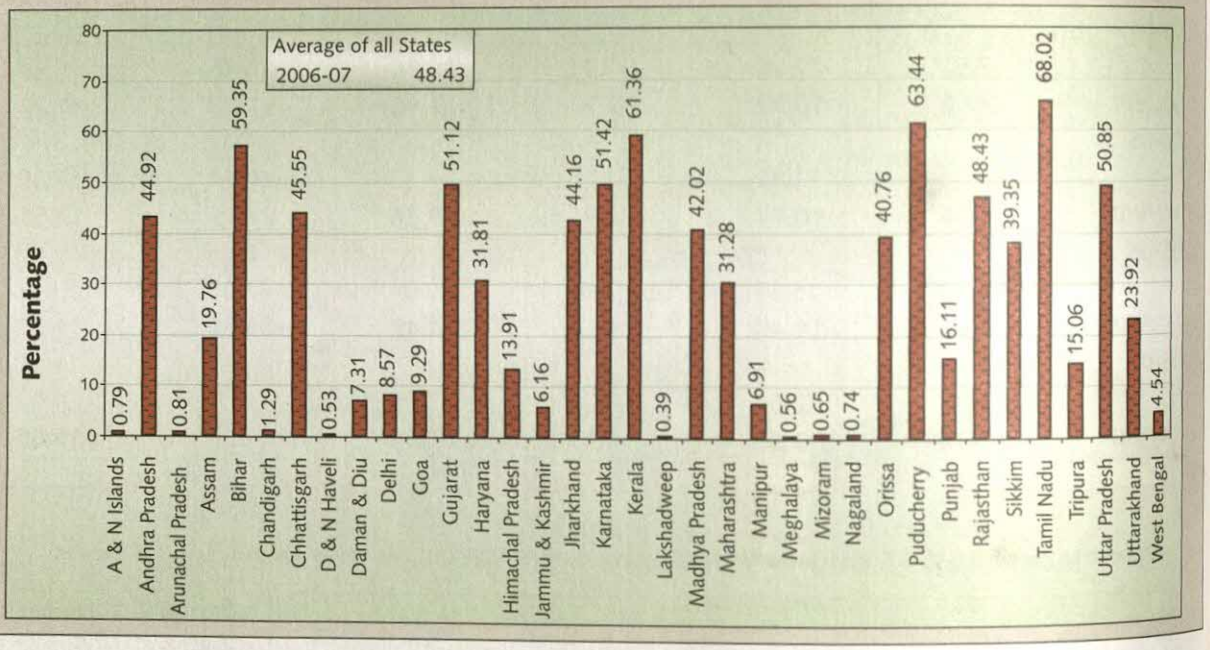
Figure 3.7

Percentage of SC & ST Enrolment in Government & Private Managed Schools : All States



above 90 percent ST enrolment (elementary classes) which matches well with the percentage share of ST to the total population. Lakshadweep also reported above 97 percent ST enrolment against 75 percent in Arunachal Pradesh and 73 percent in Dadra & Nagar Haveli. Chhattisgarh and Jharkhand also had about 32 percent ST enrolment in 2006-07 compared to about 37 percent in Sikkim and 38 percent in Tripura. All the 35 States and UTs reported tribal enrolment though there percentage in Chandigarh and Punjab is negligible. Its share to total elementary enrolment varies from 0.09 percent in Chandigarh to 97.53 percent in Mizoram. Delhi too reported 0.41 percent tribal enrolment in its elementary classes. Orissa with 23.13 percent also reported high percentage of tribal enrolment in Elementary classes in 2006-07.

Figure 3.8
Percentage of OBC Enrolment to Total Enrolment : 2006-07



So far as the percentage share of SC enrolment in the total Elementary enrolment is concerned, it has been the highest in the state of Punjab (46.89), followed by Haryana (30.50), Uttar Pradesh (27.10), Himachal Pradesh (28.24), Uttarakhand (27.10) and West Bengal (26.70); the lowest 0.02 being in Lakshadweep. The share of SC girls in the total SC enrolment in case of Bihar has been only 43.01 percent (45.35 percent in case of ST girls' enrolment) which is also the lowest in the country. However, Delhi, Meghalaya, Mizoram, Nagaland and Sikkim had a very high percentage of SC girl's enrolment (above 50 percent); many of these also have above 50 percent ST girl's enrolment.

> "Percentage of Muslim enrolment at Primary level is reported to be 9.39 percent against 7.52 percent at Upper Primary level. GPI in case of Muslim enrolment is higher than the same in case of overall enrolment, which is true for both Primary and Upper Primary levels of education"

OBC and Muslim Enrolment

Besides enrolment of Scheduled Castes and Scheduled Tribes, enrolment data of Other Backward Class (OBC) is also being collected under DISE which is presented in Table C7. For the first time, an attempt has also been made to collect data on Muslim enrolment both in the Primary and Upper Primary classes during the year 2006-07. However, the same may not present complete coverage as the information was

Table C7

Percentage of OBC & Muslim Enrolment to Total Enrolment : 2006-07

All Managements : All Areas

State/UT	%age of Muslim Population (Census 2001)	Primary Level (Classes I-V)				Upper Primary Level (Classes VI-VII/VIII)				Elementary Level (Classes I-VII/VIII)			
		Muslims*		OBC		Muslims*		OBC		Muslims*		OBC	
		%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls
A & N Islands	8.22	4.29	49.93	0.79	52.36	3.01	44.46	0.33	56.72	3.80	48.27	0.61	53.27
Andhra Pradesh	9.17	10.00	51.02	44.92	49.41	9.11	51.63	45.81	48.24	9.70	51.21	45.21	49.01
Arunachal Pradesh	1.88	NR	–	0.81	45.49	NR	–	1.17	45.60	NR	–	0.89	45.52
Assam	30.92	30.42	49.71	19.76	49.00	17.39	51.47	24.60	48.45	27.47	49.96	20.85	48.85
Bihar	16.53	8.95	46.21	59.35	45.96	6.60	42.87	58.38	40.85	8.55	45.77	59.18	45.10
Chandigarh	3.95	2.87	54.17	1.29	44.77	2.39	56.82	0.73	50.78	2.70	54.99	1.09	46.19
Chhattisgarh	1.97	0.56	46.71	45.55	49.09	0.84	50.31	49.49	47.29	0.64	47.97	46.61	48.58
D & N Haveli	2.96	NR	–	0.53	52.28	NR	–	1.04	46.88	–	–	0.63	50.51
Daman & Diu	7.76	0.12	50.00	7.31	51.66	0.55	60.61	8.82	55.09	0.24	56.86	7.75	52.78
Delhi	11.72	5.40	49.67	8.57	60.27	7.36	51.10	5.72	49.97	6.10	50.28	7.56	57.51
Goa	6.84	4.59	50.29	9.29	47.96	3.67	49.51	9.48	49.10	4.22	50.01	9.37	48.42
Gujarat	9.06	4.11	48.80	51.12	46.91	4.25	47.50	48.69	43.64	4.14	48.48	50.54	46.15
Haryana	5.78	0.55	47.01	31.81	46.57	0.41	41.86	30.27	48.43	0.50	45.67	31.31	47.15
Himachal Pradesh	1.97	1.17	46.23	13.91	46.76	1.09	42.32	14.60	47.95	1.14	44.83	14.17	47.22
Jammu & Kashmir	66.97	62.52	46.77	6.16	46.04	60.55	45.11	6.06	43.04	61.85	46.21	6.13	45.03
Jharkhand	13.85	7.29	47.72	44.16	49.31	6.30	45.40	46.11	45.98	7.13	47.39	44.48	48.74
Karnataka	12.23	13.54	49.52	51.42	48.70	12.39	50.45	52.46	48.68	13.21	49.77	51.71	48.69
Kerala	24.70	10.13	49.54	61.36	49.52	9.59	48.54	58.94	48.18	9.93	49.17	60.44	49.02

* May not represent the complete coverage as the information was collected for the first time.

Continued....

Table C7
Percentage of OBC & Muslim Enrolment to Total Enrolment : 2006-07
All Managements : All Areas

State/UT	%age of Muslim Population (Census 2001)	Primary Level (Classes I-V)				Upper Primary Level (Classes VI-VII/VIII)				Elementary Level (Classes I-VII/VIII)			
		Muslims*		OBC		Muslims*		OBC		Muslims*		OBC	
		%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls	%age of Enrolment	%age of Girls
Lakshadweep	95.47	NR	–	0.39	40.00	NR	–	0.24	28.57	NR	–	0.33	37.04
Madhya Pradesh	6.37	2.30	49.14	42.02	48.98	2.30	47.27	44.72	45.07	2.30	48.66	42.71	47.92
Maharashtra	10.60	7.94	47.95	31.28	47.33	5.83	49.21	32.03	47.09	7.24	48.28	31.53	47.25
Manipur	8.81	0.80	50.73	6.91	48.95	0.69	48.47	8.50	47.90	0.77	50.21	7.32	48.64
Meghalaya	4.28	0.04	55.35	0.56	49.47	0.02	71.43	1.11	50.14	0.03	57.22	0.66	49.68
Mizoram	1.14	–	37.50	0.65	48.03	–	–	0.62	47.00	–	–	0.64	47.81
Nagaland	1.76	0.03	54.84	0.74	45.04	0.02	42.86	0.80	45.52	0.02	52.63	0.75	45.18
Orissa	2.07	7.26	48.23	40.76	48.33	6.48	47.69	46.89	47.75	7.07	48.11	42.26	48.17
Puducherry	6.09	5.10	47.70	63.44	49.60	5.13	47.02	61.39	48.83	5.11	47.44	62.65	49.31
Punjab	1.57	0.22	41.65	16.11	46.21	0.11	41.34	17.65	47.06	0.18	41.58	16.68	46.55
Rajasthan	8.47	2.30	46.52	48.43	46.97	1.38	35.86	50.35	39.33	2.05	44.61	48.94	44.89
Sikkim	1.42	0.33	48.32	39.35	49.89	0.28	38.89	40.99	53.02	0.32	46.13	39.78	50.73
Tamil Nadu	5.56	3.82	49.17	68.02	48.32	3.95	49.21	68.13	48.06	3.87	49.18	68.06	48.23
Tripura	7.95	NR	–	15.06	48.72	NR	–	22.29	50.35	NR	–	17.18	49.34
Uttar Pradesh	18.50	9.24	47.40	50.85	49.15	7.18	46.89	46.59	46.84	8.82	47.32	49.98	48.71
Uttarakhand	11.92	NR	–	23.92	47.50	NR	–	16.27	47.25	NR	–	21.61	47.44
West Bengal	25.25	27.92	50.21	4.54	48.69	19.63	54.00	8.50	47.01	25.55	51.05	5.67	47.97
All States	**13.43**	**9.39**	**48.65**	**42.18**	**48.20**	**7.52**	**49.33**	**41.23**	**45.99**	**8.89**	**48.80**	**41.93**	**47.62**

NR : Data not reported

collected for the first time and hence should be treated as provisional. Perhaps DISE is the only source which has disseminated information on both OBC and Muslim enrolment. During the period 2005-06 to 2006-07, the percentage share of OBC enrolment in the total Primary enrolment remained almost stagnant. In 2005-06, the percentage OBC enrolment was 41.72 and 42.18 percent in 2006-07. Almost similar percentages have been observed in case of OBC enrolment in Upper Primary classes during 2005-06 and 2006-07. Bihar, Gujarat, Karnataka, Puducherry, Tamil Nadu and Uttar Pradesh reported above 50 percent OBC enrolment, both in case of Primary and Upper Primary classes.

It may be recalled that percentage of Muslim population to total population of the country in 2001 was 13.43. However, a number of states such as Assam, Bihar, Jammu & Kashmir, Kerala, Uttar Pradesh, and West Bengal, have much higher percentage of Muslim population than the national average of 13.43 percent (Table C7). On the other hand, states like Tamil Nadu, Rajasthan, Himachal Pradesh and Andhra Pradesh have lower percentage than it being at the all-India level. The percentage of Muslim enrolment at Primary level is reported to be 9.39 percent (GER 77.34 percent) against 7.52 percent at Upper Primary level. Within these levels, the percentage of girls' enrolment is as high as 48.65 (GPI, 0.95) and 49.33 (GPI, 0.97) which is higher than the percentages in case of overall enrolment presented above. Even GPI in case of Muslim enrolment is higher than the same in case of overall enrolment, which is true for both Primary and Upper Primary levels of education. In a few states (Karnataka, Orissa and West Bengal), the percentage of Muslim enrolment in Primary classes is more than their share in total population. In a few other states (Bihar, Delhi, Kerala, Maharashtra and Uttar Pradesh), their proportionate enrolment share is reported to be lower. In all these states, enrolment share in Upper Primary classes is lower than their share in population and below than their share in Primary classes.

> "There are about 40 districts in the country which have 25 percent and more Muslim students in Primary classes. Most of these districts are from the states of Assam, Bihar, Jammu & Kashmir, Karnataka, Uttar Pradesh and West Bengal"

Preliminary analysis of data suggests that there are about 40 districts in the country which have 25 percent and more Muslim students in Primary classes. Most of these districts are from the states of Assam, Bihar, Jammu & Kashmir, Karnataka, Uttar Pradesh and West Bengal. These 40 districts have around 73 thousand such Primary schools, almost 9.33 percent of total Primary schools in the country. Similarly, there are 16, 8 and 6 districts spread over these states having Muslim enrolment 50, 75 and 90 percent and above in Primary classes. Because of Muslim population size, it is quite obvious that all the 6 districts having above 90 percent Muslim population are from the state of Jammu & Kashmir. But a good number of schools from other states also have above 90 percent Muslim enrolment. The number of such schools is as high as 35 thousand which is 4.50 percent of total Primary schools in the country. On the other hand, more than 52 and 40 thousand Primary schools have Muslim enrolment above 50 and 75 percent respectively which is 6.65 and 5.25 percent of total Primary schools. It may also be observed that about 10 thousand Primary schools in Assam and 6 thousand such schools in West Bengal reported above 90 percent Muslim enrolment which is respectively 20.15 and 10.83 percent of total Primary schools in these states. With Muslim enrolment now available under DISE, locations (cluster/blocks/districts) having concentration of Muslim children (in schools) can be identified; even individual school can be identified along with other variables that are being maintained under DISE. It is hoped that coverage in terms of Muslim enrolment under DISE would further improve in the following year.

Share of Disabled Children in Enrolment

DISE data on children with disability and the nature of disability is of great help in developing inclusive education and special education programmes. Together with information on availability of ramp in schools, DISE has become a regular source of data on this aspect. DISE data also covers nature of disability by grades which, if analysed efficiently, can be of great help in developing inclusive education programmes at different levels. Schools having disabled children could be identified by nature of disability under DISE over a period of time.

Number of Disabled Children

Data on disabled children in elementary classes collected under DISE reveals that there number varies from year to year. In the year 2003-04, there were 1.75 million such children as against 1.40 million in 2004-05. However, their number has always remained around one percent of the total enrolment in elementary classes. In 2006-07, about 1.42 million disabled children were enrolled in elementary classes across the country, of which 1.04 million were in Primary and 0.38 million in Upper Primary classes (Table C8). The percentage of children with disability, in Primary, is 0.79 and in Upper Primary 0.80 of the total enrolment in these classes. The corresponding percentage at the Elementary level is 0.80. The percentage share of girls with disability in the total of such enrolment in Primary, Upper Primary and Elementary classes in 2006-07 was 41.63, 42.37 and 41.83 respectively. The corresponding enrolment percentages for 2005-06 are 41.47, 40.18 and 41.17. This is also reflected in the Gender Parity Index computed in case of disabled children. Irrespective of the level, the calculated GPI works out to be much lower than the same in case of overall enrolment. The GPI is as low as 0.71 in Primary, 0.74 in Upper Primary and 0.72 in case of Elementary enrolment. Urban areas have a slightly higher GPI compared to the rural areas. However, of the total disabled enrolment at the Primary, Upper Primary and Elementary levels in the country, the percentage of disabled children in the rural areas in 2006-07 has been as high as 86.34, 75.35 and 83.40 respectively.

Table C8

Enrolment of Children with Disability : 2003-04 to 2006-07

Grades	All Areas			Rural Areas			Urban Areas		
	Girls	Total	GPI*	Girls	Total	GPI	Girls	Total	GPI
2003-04									
I-V	558481	1346186	0.71	491903	1187677	0.71	64807	15413	0.73
VI-VII/VIII	161655	412297	0.64	130961	341577	0.62	30368	69668	0.77
I-VII/VIII	**720136**	**1758483**	**0.69**	**622864**	**1529254**	**0.69**	**95175**	**223791**	**0.74**
2004-05									
I-V	410860	1017392	0.68	357482	892191	0.67	52766	123612	0.74
VI-VII/VIII	158600	381951	0.71	102314	260260	0.65	56044	121144	0.86
I-VII/VIII	**569460**	**1399343**	**0.69**	**459796**	**1152451**	**0.66**	**108810**	**244756**	**0.80**
2005-06									
I-V	512993	1236891	0.71	448097	1082624	0.71	64611	153560	0.73
VI-VII/VIII	152684	379965	0.67	120026	304078	0.65	32568	75653	0.76
I-VII/VIII	**665677**	**1616856**	**0.70**	**568123**	**1386702**	**0.69**	**97179**	**229213**	**0.74**
2006-07									
I-V	434606	1043906	0.71	373332	901303	0.71	61208	142433	0.75
VI-VII/VIII	161397	380928	0.74	117809	287029	0.70	43520	93720	0.87
I-VII/VIII	**596003**	**1424834**	**0.72**	**491141**	**1188332**	**0.70**	**104728**	**236153**	**0.80**

*Gender Parity Index.

Rural and Urban total may not add to true total because of no-responses in a category.

Enrolment by Nature of Disability

Almost one in every three disabled students in Elementary classes is found to be having some problem in moving (28.56 percent). About 24 percent students are visually handicapped, 12 percent hard-of-hearing, 12 percent disabled in speech, about 17 percent students mentally retarded and 7 percent have other types of disabilities. This percentage is quite similar to percentages in the previous year. Much difference is noticed in the nature of disability in children in Primary and Upper Primary classes (Table C9). Compared to 20.79 percent visually handicapped children in Primary classes, their percentage in Upper Primary classes is as high as 32.87. On the other hand, 19.68 percent disabled children in Primary classes are mentally retarded; their corresponding percentage in Upper Primary classes is much low at 8.62. It is observed that more than 32 percent disabled children in Upper Primary classes have problem in moving. Not much difference is observed in other disability types.

Figure 3.9

Percentage of Disabled Students by Nature of Disability : All States

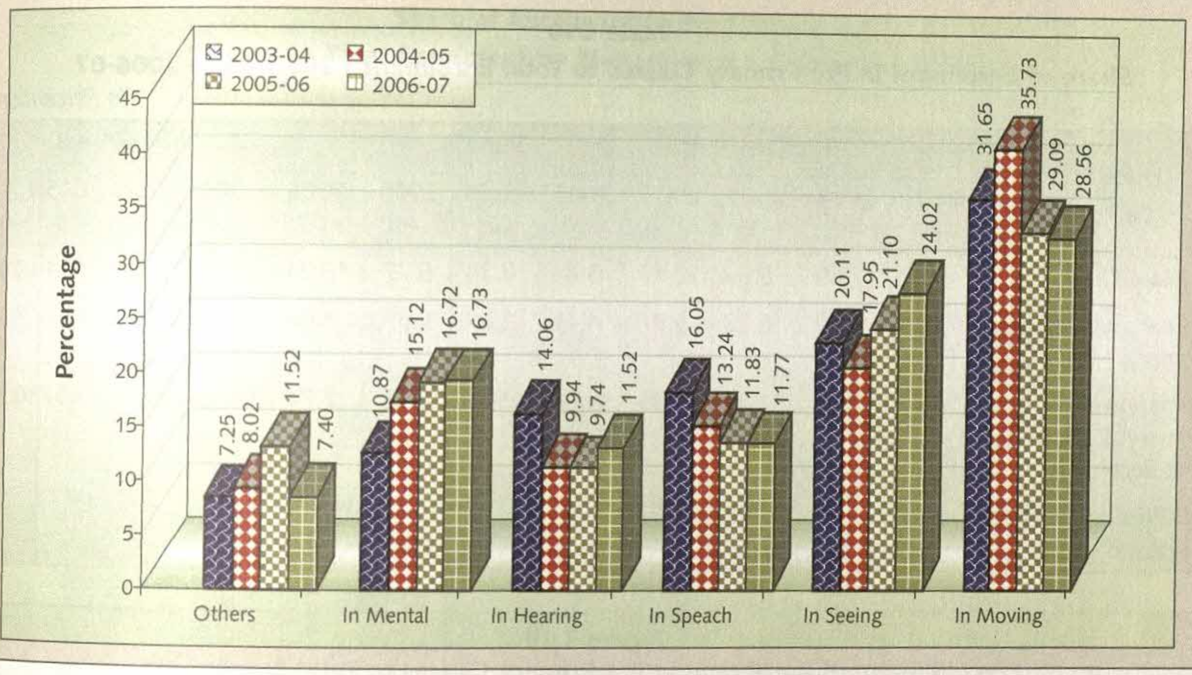


Table C9

Enrolment by Nature of Disability : 2006-07

(In Percentage)

Disability in	Grades		
	I-V	VI-VIII	I-VIII
Seeing	20.79	32.87	24.02
Hearing	11.69	11.04	11.52
Speech	13.04	8.28	11.77
Moving	27.28	32.09	28.56
Mentally Retarded	19.68	8.62	16.73
Others	7.51	7.10	7.40
% to Total Enrolment	**0.79**	**0.80**	**0.80**

Share of Pre-Primary Enrolment

Percentage share of enrolment in Pre-primary classes in the total enrolment by school category reveals that the percentage is low. It was as low as 8.62 percent in 2006-07 compared to 6.69 in 2005-06. The highest 61.94 percent is noticed in Meghalaya and the lowest, 1.43 percent, in Delhi. At least, 5 states (Arunachal

Pradesh, Meghalaya, Mizoram, Nagaland and Puducherry) reported percentages above 20.

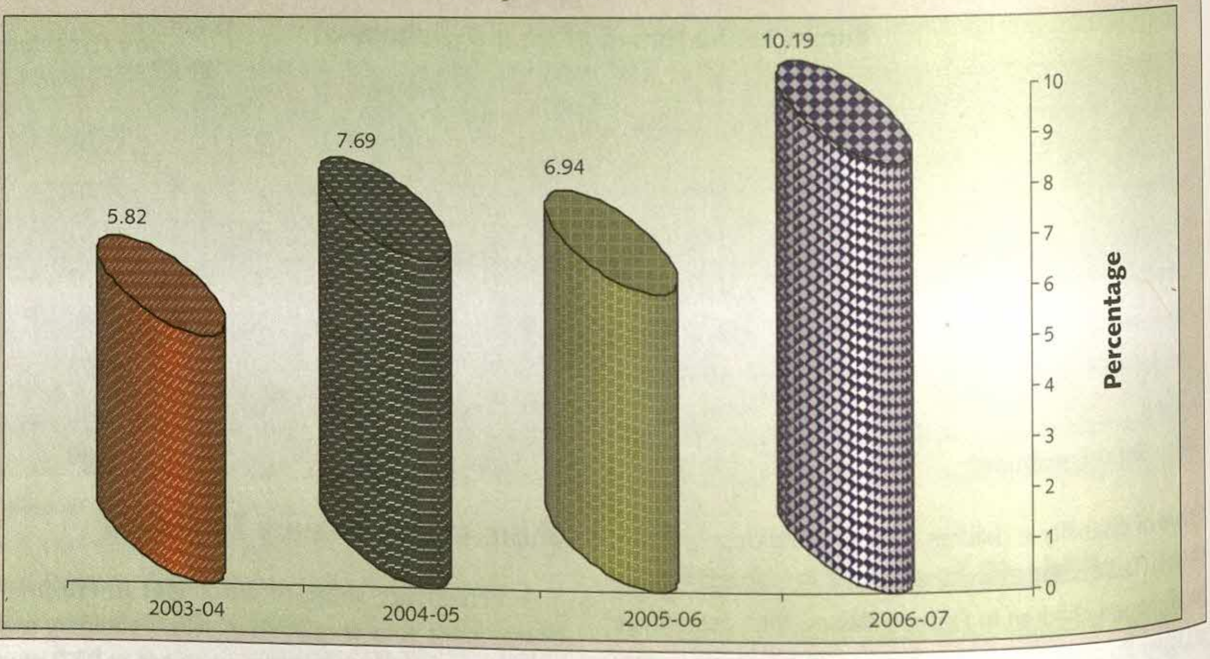
The share of enrolment in Pre-primary classes is also analysed by school types which also shows low percentages irrespective of school types. It was 10.19, 5.37 and 8.99 respectively in the case of Primary, Elementary and Higher Secondary schools. Further, it has been observed that the percentage of Pre-primary enrolment in these types of schools, barring Primary schools, is a bit higher in urban areas (7.61 and 10.36) compared to that in the rural areas (4.66 and 7.74) respectively in case of independent Elementary and integrated Higher Secondary Schools. However, it was a bit higher in rural areas (10.21 percent) compared to 10.06 percent in urban areas in case of Primary schools. The percentage is also low in government managed schools, compared to private managed schools. This is

Table C10
Share of Enrolment in Pre-Primary Classes to Total Enrolment : 2003-04 to 2006-07

(In Percentage)

School Category	All Areas				Rural Areas				Urban Areas			
	2003 –04	2004 –05	2005 –06	2006 –07	2003 –04	2004 –05	2005 –06	2006 –07	2003 –04	2004 –05	2005 –06	2006 –07
Primary Only	5.82	7.69	6.94	10.19	5.44	7.38	6.77	10.21	8.68	10.02	8.34	10.06
Primary with Upper Primary	7.16	7.70	6.23	5.37	6.45	6.77	5.55	4.66	9.37	10.81	8.42	7.61
Primary with Upper Primary & Secondary /Hr. Secondary	16.22	17.04	11.22	8.99	13.06	15.06	8.98	7.74	19.30	18.95	13.97	10.36
All Primary Schools/ Sections	**–**	**7.26**	**6.69**	**8.62**								

Figure 3.10
Percent Share of Enrolment in Pre-Primary Classes to Total Enrolment in Primary Schools : All States



true for all schools types. For example, in case of schools managed by government, it was 9.88 percent against 11.93 percent in private managed Primary schools (Table C10). The corresponding figures for government and private managed Elementary schools are 3.78 and 9.18 percent and in case of integrated Higher Secondary schools the respective figures are 5.95 and 10.56 percent.

Table C11

Share of Enrolment in Pre-Primary

Classes to Total Enrolment by Management : 2003-04 to 2005-06

(In Percentage)

School Category	School Management		
	All Managements	Government Managements	Private Managements
Primary only			
2003-04	5.82	5.47	8.14
2004-05	7.69	7.32	10.06
2005-06	6.94	6.71	8.22
2006-07	**10.19**	**9.88**	**11.93**
Primary with Upper Primary			
2003-04	7.16	5.56	11.82
2004-05	7.70	5.60	13.91
2005-06	6.23	4.88	9.58
2006-07	**5.37**	**3.78**	**9.18**
Primary with Upper Primary & Secondary/ Hr. Secondary			
2003-04	16.22	10.87	18.86
2004-05	17.04	12.16	19.14
2005-06	11.22	5.74	14.08
2006-07	**8.99**	**5.95**	**10.56**

Amongst the major states, the highest percentage of Pre-primary enrolment in Primary schools is noticed in the case of Madhya Pradesh (22.38) and the lowest of 2.38 in Bihar. Maharashtra has an enrolment of 20.13 percent, Haryana 15.45 percent and Chandigarh 13.54 percent in Primary schools compared to 28.45 percent in Jammu & Kashmir and 11.40 percent in Uttar Pradesh. Except Mizoram (16.40 percent) and Tripura (1.77 percent), all other states in the north-eastern region reported a high percentage of enrolment in Pre-Primary sections attached to Primary schools. The percentage in Sikkim is as high as 29.83 compared to 35.55 in Arunachal Pradesh and 68.95 percent in Meghalaya. On the other hand, in Kerala, enrolment is 5.23 percent. Madhya Pradesh (11.67 percent) too has a high percentage of Pre-primary enrolment in Elementary schools compared to 15.86 percent in Uttarakhand. Chandigarh, Chhattisgarh, Himachal Pradesh, Meghalaya, Mizoram, Nagaland, Sikkim and Uttarakhand too have

> "The highest percentage of Pre-primary enrolment in Primary schools is noticed in Madhya Pradesh and the lowest in Bihar. Madhya Pradesh too has a high percentage of Pre-primary enrolment in Elementary schools"

a significant percentage of enrolment in Pre-primary sections attached to Elementary schools. In the national capital Delhi, the percentage of Pre-primary to total enrolment in Primary and independent Elementary schools is 2.17 and 1.13 respectivelty. Compared to the Pre-primary enrolment in Primary and Elementary schools, the corresponding percentage in the case of integrated Higher Secondary schools in 2006-07 was much higher at 8.99. A number of states, including from the north-eastern region, has much higher percentage in this school type compared to Primary and independent Elementary schools presented above.

Table C12

Percentage Share of Enrolment in Single-Teacher Schools : 2003-04 to 2006-07

School Category	All Areas				All Government Managements	All Private Managements
	2003-04	2004-05	2005-06	2006-07	2006-07	
Primary Only	11.75	12.58	8.39	8.16	9.03	2.86
Primary with Upper Primary	1.11	1.23	1.04	1.50	1.35	1.86
Primary with Upper Primary & Secondary/ Hr. Secondary	1.34	1.18	1.01	1.05	1.19	0.97
Upper Primary Only	5.77	8.23	6.93	4.45	6.37	1.06
Upper Primary & Secondary /Hr. Secondary	0.83	1.10	0.79	0.63	1.02	0.33
All Schools	**7.65**	**8.28**	**5.65**	**4.92**	**6.11**	**1.64**

> "In a few states, like Bihar and Jharkhand, the percentage of enrolment in single-teacher Primary schools, both in case of all government and private managements together is high"

Enrolment in Single-Teacher Schools and Schools with Student-Classroom Ratio 60 & Above

Enrolment in Single-Teacher Schools

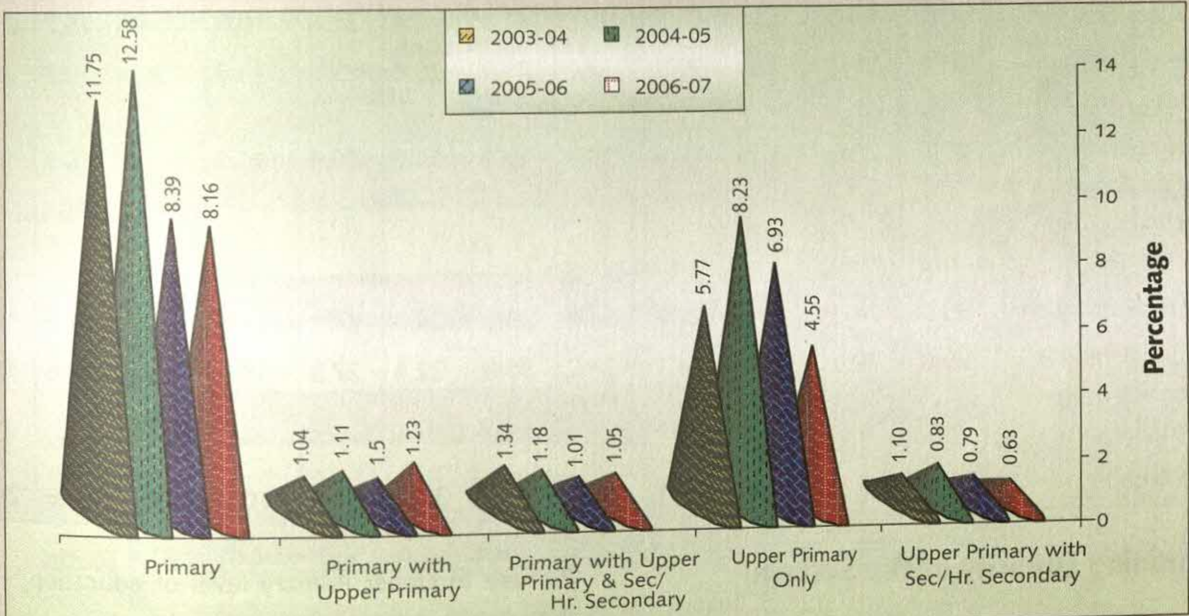
The percentage of enrolment in single-teacher schools declined significantly over a period of time. As mentioned above, in 2006-07 15.90 percent Primary schools were found to be single-teacher schools, having 8.39 percent of the total enrolment in Primary classes. A much lower percentage of enrolment in single-teacher schools is observed in schools located in urban areas (3.97 percent), compared to 8.82 percent in rural areas. Enrolment in other types of single-teacher schools, barring Upper Primary schools, is below 2 percent. The percentage of enrolment in single-teacher Upper Primary schools is 4.45. However, in urban areas it is as low as 0.90 percent. Of the total enrolment in Grades I-VIII, all government schools together have 6.11 percent enrolment in single-teacher schools, compared to only 1.64 percent in private managed schools (Table C12).

Chandigarh and Lakshadweep have not reported enrolment in single-teacher Primary schools, while enrolment in such schools in Daman & Diu, Delhi, and Kerala, is negligible. This is quite similar to the percentages in the previous year 2005-06. On the other hand, the highest enrolment in single-teacher Primary schools is observed in Arunachal Pradesh (36.27 percent), followed by Rajasthan (32.00 percent), Assam (25.58 percent), Madhya Pradesh (19.08 percent), Jharkhand (17.04 percent), Goa (12.21 percent), Uttarakhand (12.15 percent), Orissa (10.44 percent), Bihar (5.31 percent) and Meghalaya (9.99 percent). The lowest enrolment is in Kerala at 0.06 percent. Further, it is observed that in a few states, like Bihar and Jharkhand, the percentage of enrolment in single-teacher Primary schools, both in case of all government and private managements together, is high. For stance, percentage of such schools under Private managements in Jharkhand is as high as 14.32 compared to 14.97 in Assam and 10.22 in Bihar.

Enrolment in Schools with Student-Classroom Ratio 60 & Above

Of the total schools that have been imparting Elementary education in 2006-07, about 31.1 percent are located in schools having student-classroom ratio of 60 and above; this percentage was 30.7 in 2005-06. In these schools (all categories), on an average, at least 60 children sit in one classroom (Table C13). The percentage of enrolment in such schools in Bihar is as high as 81.37, compared to 45.61 in Jharkhand, 45.98 in Assam, 18.09 in Chhattisgarh, 13.50 in Haryana, 20.75 in Delhi, 33.29 in Madhya Pradesh, 19.84 in Orissa, 10.23 in Rajasthan, 46.51 in Uttar Pradesh, 13.31 in Uttarakhand and 47.69 in West Bengal. It seems that classrooms in these states are a bit crowded. In case of Bihar and Uttar Pradesh, it is also true for other school types.

Figure 3.11
Percentage Enrolment in Single-Teacher Schools : All States



Enrolment in such schools located in urban areas is much less (24.8 percent) than in schools located in rural areas (33.2 percent). Percentage of enrolment in schools having student-classroom ratio 60 and above under government managements is quite high (34 percent) than the same in private managed schools (29 percent). Notably, 29.2 percent of the total enrolment in case of independent Elementary schools is in schools that have the student-classroom ratio of 60 and above, compared to 24.1 percent in case of Upper Primary attached to Secondary and Higher Secondary schools. The lowest percentage of 18.6 is noticed in case of integrated Higher Secondary schools (Tables C13).

Of the total enrolment in Primary schools, 36.42 percent in 2006-07 has been in schools that have student-classroom ratio 60 and above. The percentage of enrolment in case of Bihar has been as high as 77.99 percent compared to 52.18 in Uttar Pradesh. Despite the decline in percentage over the previous year, Primary classrooms in these states are still over-crowded. Assam (51.63 percent), Chhattisgarh (21.36 percent), Haryana (19.56 percent), Jharkhand (31.73 percent), Madhya Pradesh (33.29 percent), Maharashtra (20.89 percent), Orissa (14.80 percent), Rajasthan (11.15 percent) and West Bengal (42.08 percent) too have a high percentage of enrolment in such schools. This otherwise suggests that majority of primary students sit in a classroom which has at least 60 students. On the other hand, percentage of enrolment in schools having student-classroom ratio 60 and above in Himachal Pradesh is only 1.44 compared to 3.15 in Kerala. Mizoram (2.27 percent) and Sikkim (2.30 percent) too have a low percentage of enrolment in schools with student-classroom ratio 60 and above.

Table C13

Share of Enrolment in Schools with Student-Classroom Ratio 60 & Above : 2003-04 to 2006-07

(In Percentage)

School Category	All Areas				Rural Areas				Urban Areas			
	2003–04	2004–05	2005–06	2006–07	2003–04	2004–05	2005–06	2006–07	2003–04	2004–05	2005–06	2006–07
Primary only	43.0	39.0	38.5	36.4	45.0	41.0	40.4	37.6	35.0	26.0	25.7	28.9
Primary with Upper Primary	33.0	21.0	22.4	29.2	32.0	21.0	23.6	29.2	35.0	19.0	18.3	29.2
Primary with Upper Primary & Secondary/ Hr. Secondary	19.0	20.0	17.4	18.6	24.0	19.0	16.0	20.6	14.0	20.0	18.9	16.7
Upper Primary only	30.0	24.0	22.3	22.7	31.0	25.0	24.4	24.1	23.0	17.0	11.9	16.4
Upper Primary & Secondary/ Hr. Secondary	29.0	32.0	28.5	24.1	34.0	35.0	32.4	27.3	18.0	24.0	19.6	16.7
All Schools	**37.0**	**32.0**	**30.7**	**31.1**	**39.0**	**34.0**	**33.2**	**32.8**	**30.0**	**23.0**	**20.6**	**24.8**

Retaining Capacity of the System

The country has made significant progress towards achieving goal of universal access. Almost 94 percent habitations have got access to Primary and 89 percent to Upper Primary schooling facilities. On the other hand, enrolment, both at Primary and Upper Primary levels of education has also increased many-fold, resulting into significant decline in out-of-school children. However, it is equally important to know the retaining capacity of the education system for which a variety of efficiency related indicators can be used. Keeping in view the availability of data under DISE, an attempt has been made in the present section to discuss survival rate, retention rate, average promotion, repetition and dropout rate, indicators of internal efficiency of education system and transition from Primary to Upper Primary level of education. The indicators have been constructed both at the state and national levels, all of which present fairly good information about the efficiency of the education system across states.

> "An attempt has been made in the present section to discuss survival rate, retention rate, average promotion, repetition and dropout rate, indicators of internal efficiency and transition from Primary to Upper Primary level of education"

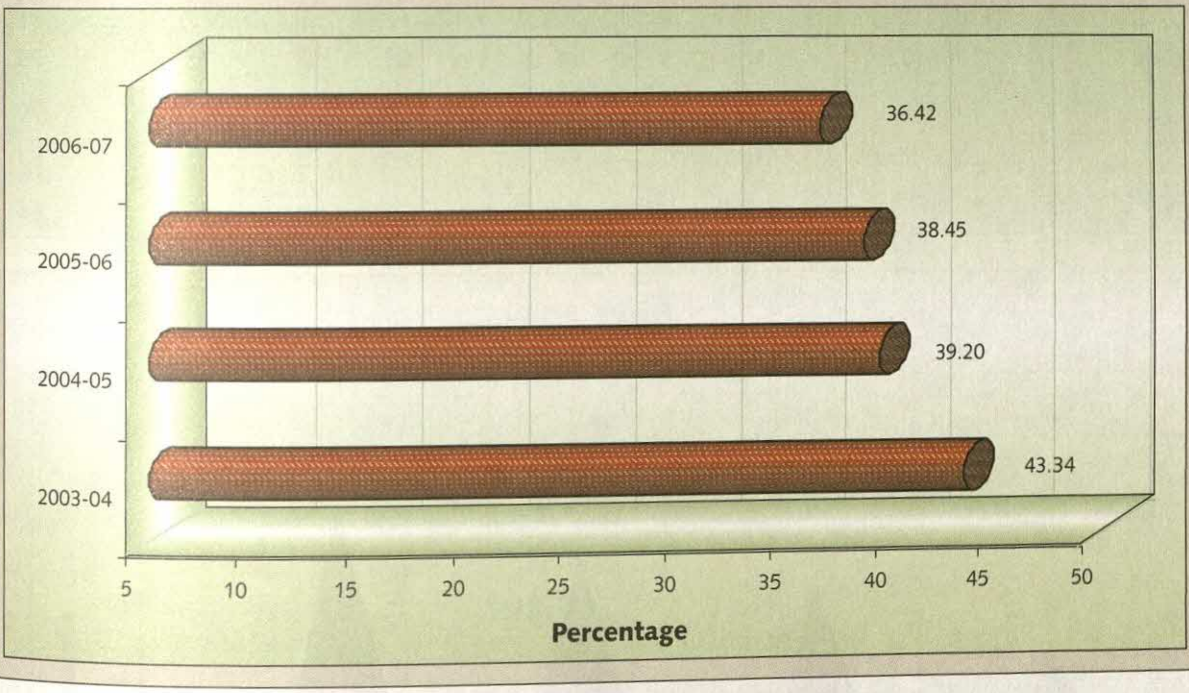
Apparent Survival Rate

Apparent survival rate is the simplest way through which the efficiency of an education system can be judged. Share of enrolment in Grade II and subsequent primary grades in relation to the enrolment in Grade I in a year is worked out. The rate thus arrived at is considered crude as it is based upon the enrolment data of only one year. However, it reveals interesting and useful information about the retaining capacity of the system. The apparent survival rate at the all-India level, presented in Table C14, reveals that over a period of time the same has improved impressively. It is true for both boys and girls. At the all-India level, it has improved from 63 percent in 2003-04 to 67 percent in 2004-05, 70 percent in 2005-06 and further to 73 percent in 2006-07. Almost similar trend is observed in case of boys and girls. However, it is seen that more boys (73 percent) survived up to Grade V than their counterpart girls (68 percent). A look at the apparent survival rate in rural (70 percent) and urban (86 percent) areas reveals a significant difference, which is also separately true for boys and girls.

> "Andhra Pradesh and Karnataka, have a high apparent survival rate, which is also true in the smaller states, like Goa"

The state-specific apparent survival rate for 2006-07 presented in Table C15 reveals that in a number of states, the same is very low to attain the status of universal retention. On the other hand, states in the southern region, such as Andhra Pradesh and Karnataka, have a high apparent survival rate, which is also true in the smaller states, like Goa. In Karnataka, it is reported to be 96 percent compared to only 54 percent in Bihar and Madhya Pradesh, 36 percent in Arunachal Pradesh and 38 percent in Jharkhand. Unless, all the states attain a high survival rate, the goal of universal retention at the Primary level may not be realised. Though apparent survival rate produces quick estimate, it fails to present information about the internal dynamics of the education system. For that purpose retention as well as dropout, repetition and promotion rates have been analysed.

Figure 3.12
Percentage of Enrolment in Primary Schools with Student-Classroom Ratio Above 60 : All Schools



Retention Rate

In the most commonly used method of assessing retaining capacity of the system, enrolment in Grade V (*minus* Repeaters) in a year *(say 2006-07)* is linked to enrolment in Grade I four years back *(say 2002-03)*. Hundred minus retention rate is termed as drop-out rate.

Table C14

Apparent Survival Rate, Primary Grades : 2003-04 to 2006-07

Gender	Cohort	Percentage				
		Grade I	Grade II	Grade III	Grade IV	Grade V
Boys	**2006-07**	**100**	**86**	**81**	**76**	**73**
	2005-06	100	84	79	74	71
	2004-05	100	83	80	73	68
	2003-04	100	84	76	69	65
Girls	**2006-07**	**100**	**87**	**81**	**81**	**72**
	2005-06	100	84	79	81	68
	2004-05	100	84	81	80	66
	2003-04	100	84	76	75	62
Total	**2006-07**	**100**	**86**	**81**	**75**	**73**
	2005-06	100	84	79	74	70
	2004-05	100	84	80	72	67
	2003-04	100	84	76	68	63

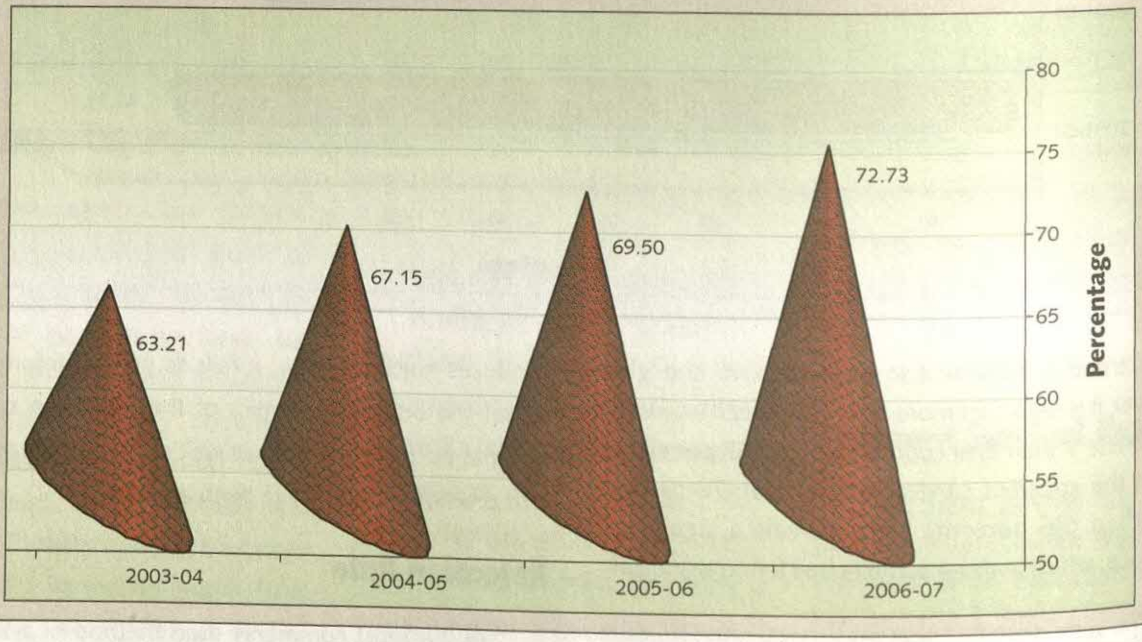


Figure 3.13
Survival Rate - Grade V : All States

Needless to mention that retention rate is based on enrolment data over a period of five years whereas apparent survival rate presented above, a stock statistics, is based on enrolment data of only one year. The DISE has now been made operational across the country but in none of the 35 states, grade-specific enrolment at Primary level is available over a period of five years for the entire state. However, there are a few districts in each state, which have grade-specific enrolment data available over a period of five years. Based on the enrolment data of such districts, retention rate at the Primary level of education is calculated and the same is presented in Table C16. The retention rate presented does not apply to the entire state or the country as a whole but fairly indicates retaining capacity of primary education system in a state.

The retention rate at the Primary level for the years 2003-04, 2004-05 and 2005-06 presented in Table C16 is based upon the enrolment data of 123, 184 and 286 districts. For the year 2006-07, it is based on 498 districts,

Table C15
Apparent Survival Rate: Primary Grades, 2006-07

State/UT	Apparent Survival Rate				
	Grade I	Grade II	Grade III	Grade IV	Grade V
Andhra Pradesh	100	89	82	81	81
Arunachal Pradesh	100	57	48	40	36
Assam	100	74	68	65	58
Bihar	100	76	67	60	54
Chhattisgarh	100	85	77	69	62
Dadra & Nagar Haveli	100	93	81	72	72
Delhi	100	89	86	84	82
Goa	100	90	85	87	82
Gujarat	100	97	89	84	80
Haryana	100	89	89	88	85
Jammu & Kashmir	100	94	-	-	92
Jharkhand	100	66	59	50	38
Karnataka	100	99	-	96	96
Madhya Pradesh	92	88	78	78	54
Maharashtra	100	93	89	87	85
Manipur	100	73	57	52	49
Meghalaya	100	74	65	55	43
Mizoram	100	79	75	68	64
Nagaland	100	96	90	80	65
Rajasthan	100	76	65	57	57
Tripura	100	88	90	84	79
Uttar Pradesh	100	92	86	75	68
Uttarakhand	100	87	84	-	71
All States	**100**	**86**	**81**	**75**	**73**

Note: States reported survival rate above 100 is not presented. This is more specifically true in case of states having Grades I to IV as component of the primary structure.

that is, 82 percent of total districts in the country. The retention rate presented otherwise also represents every 8th out of 10 districts; thus making it fairly a representative sample of the entire country. The retention rate shows a gradual improvement from 53.43 percent in the year 2003-04 to 58.11 percent in 2004-05 and further improved to 70.26 percent in 2006-07. Still it is too low to achieve the goal of universal retention at the Primary level. A retention rate of 70 percent indicates that about 30 percent children dropped out from the system before reaching Grade V.

> "Retention rate shows a gradual improvement from 53.43 percent in 2003-04 to 58.11 percent in 2004-05 and further improved to 70.26 percent in 2006-07. Still it is too low to achieve the goal of universal retention at the Primary level"

However, a few states have much higher retention rate at Primary level than the average (70.26 percent) of 498 districts. Tamil Nadu (around 94 percent), Kerala (99 percent), Himachal Pradesh (94 percent), Madhya Pradesh (95 percent) and Karnataka (92 percent) are such states. Many of these represent the entire state as all the districts have been considered in computing retention rate. It seems that with a little more effort, these states can easily move towards achieving the goal of universal retention at the Primary level of education. But the situation in rest of the states included in the analysis is not encouraging. In Bihar and Rajasthan, the retention rate is

Table C16

Retention Rate at the Primary Level : 2006-07

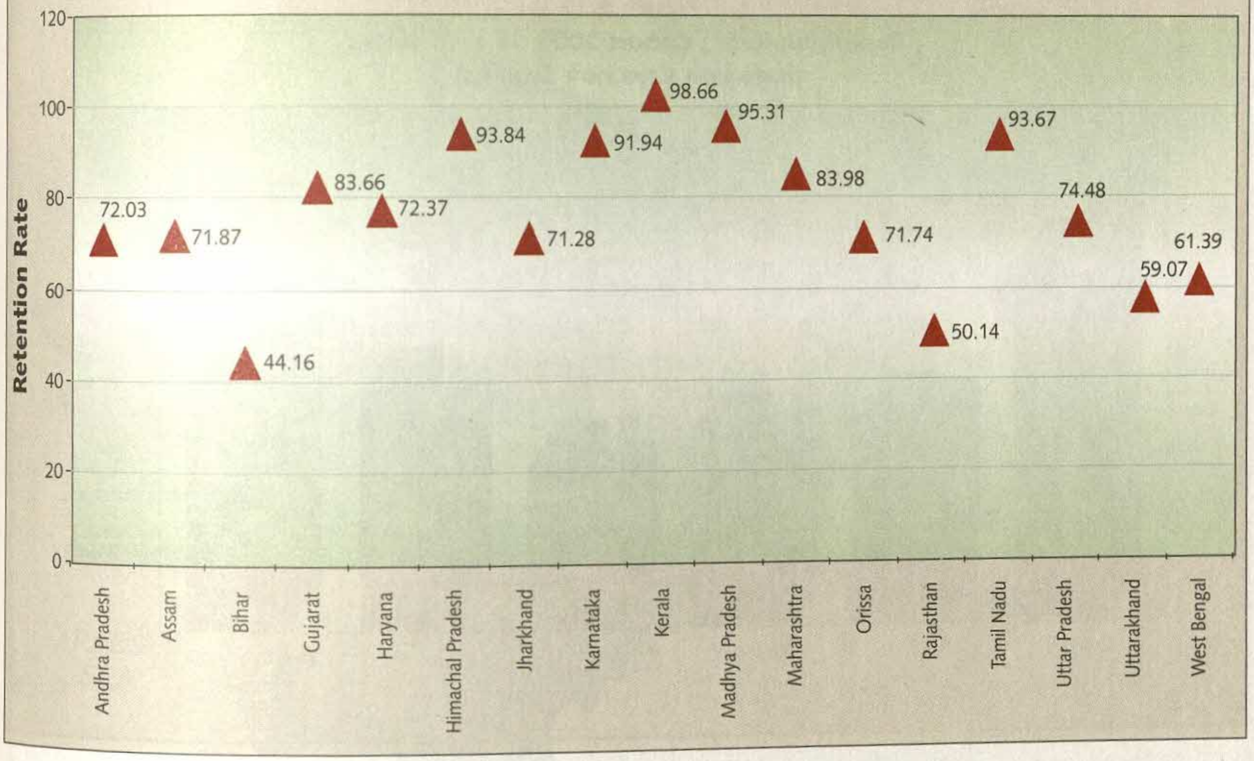
State	Education Cycle	Number of Districts	Retention Rate (%)
Andhra Pradesh	I -V	23	72.03
Assam	I -V	23	71.87
Bihar	I -V	37	44.16
Chhattisgarh	I -V	16	69.35
Gujarat	I - IV	25	83.66
Haryana	I -V	10	72.37
Himachal Pradesh	I -V	12	93.84
Jharkhand	I -V	22	71.28
Karnataka	I - IV	27	91.94
Kerala	I - IV	14	98.66
Madhya Pradesh	I -V	45	95.31
Maharashtra	I - IV	35	83.98
Meghalaya	I - IV	7	57.11
Mizoram	I - IV	8	78.13
Orissa	I -V	30	71.74
Rajasthan	I -V	32	50.14
Tamil Nadu	I -V	29	93.67
Uttar Pradesh	I -V	70	74.48
Uttarakhand	I -V	13	59.07
West Bengal	I - IV	20	61.39
Average : 2006-07		**498**	**70.26**
Average : 2005-06		286	71.01
Average : 2004-05		184	58.11
Average : 2003-04		123	53.43

low at 44.16 and 50.14 percent respectively, compared to 59.07 percent in Uttarakhand and 61.39 percent in West Bengal. Without much improvement, neither these states nor the country as a whole can achieve the goal of universal retention at the Primary level of education.

With the help of enrolment and repeaters, first the number of promotees, repeaters and dropouts across the primary grades is obtained which in turn is linked to the enrolment in the previous grade in the previous year, to obtain grade-specific promotion, repetition and dropout rates (Table C17) and then averages of these rates in Primary classes is computed.

Figure 3.14

Retention Rate at Primary Level : 2006-07



Average Flow Rates

The retention rate presents retaining capacity of the system but it fails to identify limitations in the system. Therefore, it is better to analyse average flow rates in primary grades. The average flow rates have been calculated based upon the enrolment and repeaters data of common schools. Common schools (about 84 percent of the total schools) are the schools which have been covered both in the years 2005-06 and 2006-07.

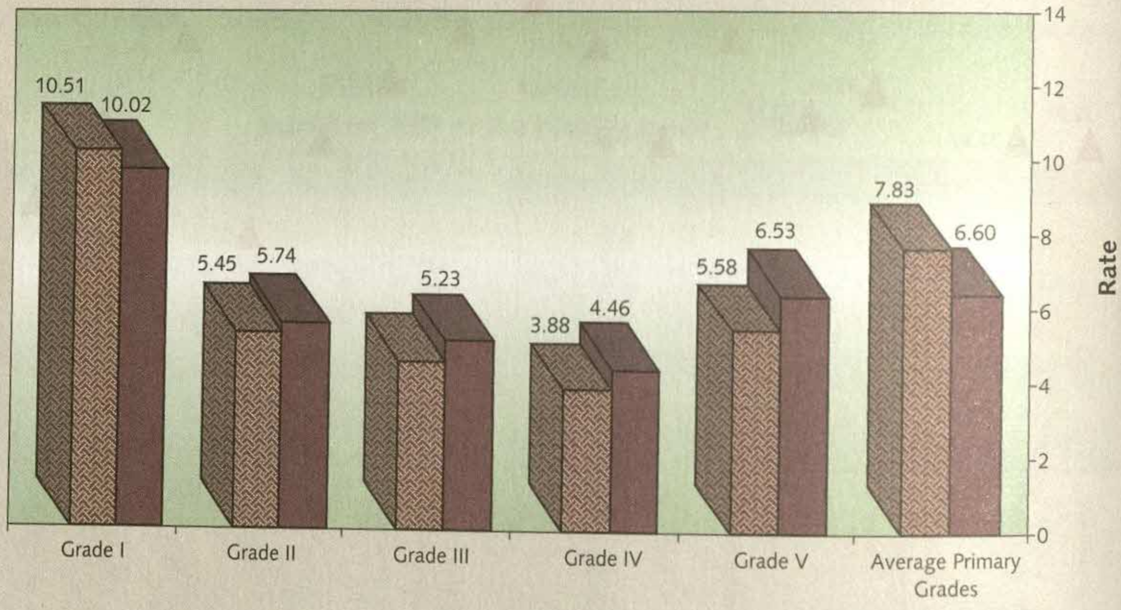
> "Average promotion rate in Grades I-V has improved from 83.76 percent in 2004-05 to 84.79 percent in 2005-06"

Analysis of Flow Rates

Promotion Rate

It is observed that average promotion rate in Grades I-V for cohort 2005-06 has improved from its previous level of 83.76 percent in 2004-05 to 84.79 percent; the corresponding figures being 84.32 percent for boys, and 85.31 percent for girls for cohort 2004-05. It is interesting to observe higher promotion rate for girls both at the national level and also in a few states. For instance, in Bihar 80.62 percent girls were promoted against 78.68 percent boys. It may also be noted that as many as 16 states have reported a lower rate than the average of all states together (84.79 percent). Bihar (79.54 percent), Chhattisgarh (80.76 percent), Haryana (80.43 percent), Madhya Pradesh (80.05 percent), Orissa (64.33 percent), Rajasthan (79.86 percent) and Uttarakhand (81.24 percent) are such states. On the other hand, Meghalaya (76.19 percent) and Sikkim (71.71 percent) also reported lower average promotion rates; both of these states are from the north-eastern part of the country. In a few states, such as Kerala (95.09 percent), Himachal Pradesh (94.67 percent) and Tamil Nadu (97.54 percent), almost all the children in Primary Grades I-V were promoted to next Grade. Consequently, average repetition and dropout rates in these states are much lower than the same in the other states.

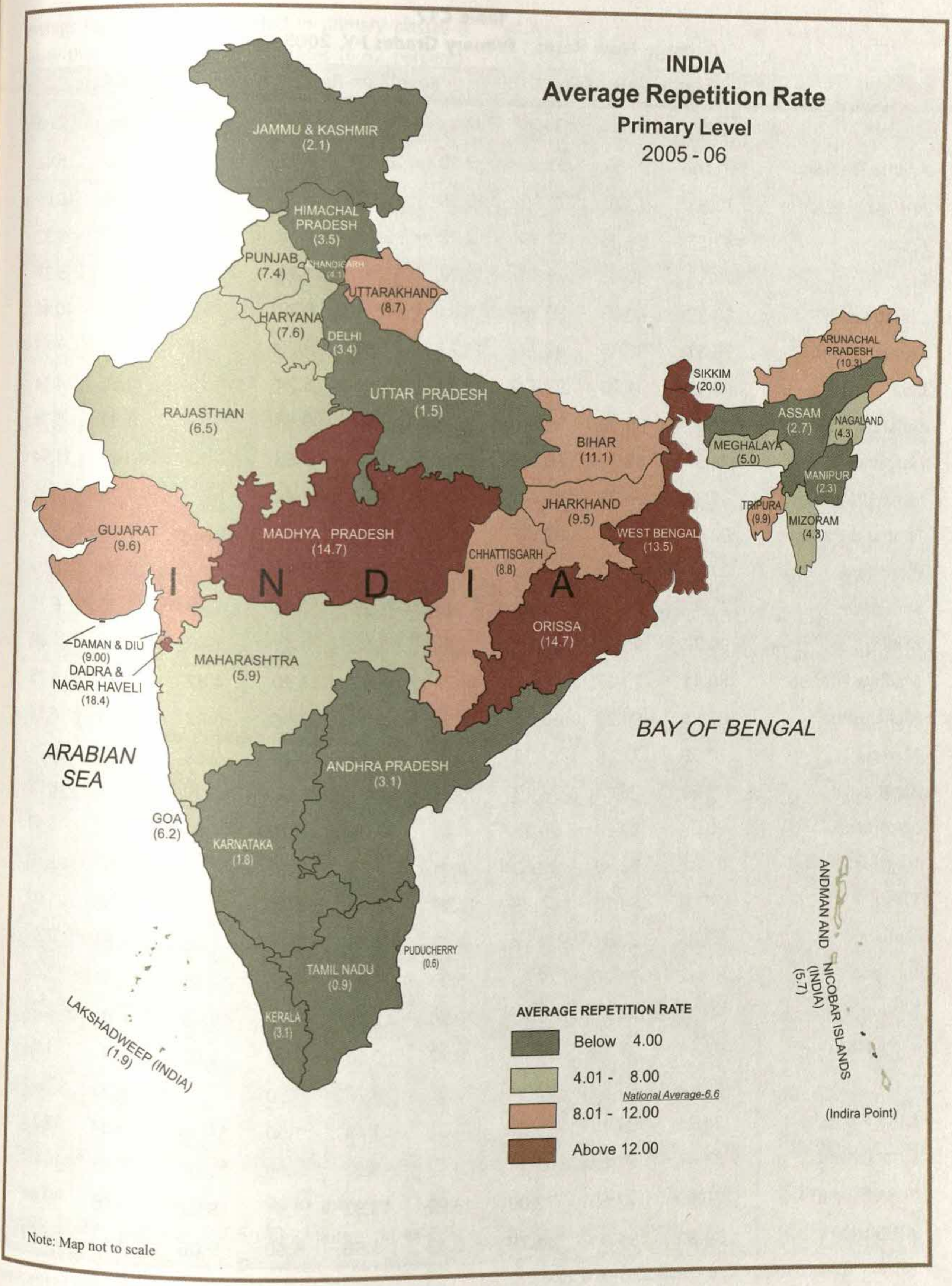
Figure 3.15
Repetition Rate : Cohort 2005-06 : All States
(Based on Common Schools)



> "As many as 16 states reported a lower promotion rate than the average of all states together. In states, such as Kerala, Himachal Pradesh and Tamil Nadu, almost all the children in Primary Grades I-V were promoted to next Grade"

Repetition Rate

The average repetition rate in primary classes during the period 2004-05 to 2005-06 remained stagnant. As many as 6.60 percent children repeated primary grades compared to 6.29 percent in the previous year. No difference is noticed between boys (6.62 percent) and girls (6.58 percent) repeating primary grades in 2005-06. The average repetition rate in a few states, such as, Arunachal Pradesh (10.26 percent), Bihar (11.13 percent), Gujarat (9.58 percent), Jharkhand (9.51 percent), Orissa (14.65 percent), Sikkim (19.99 percent) and West Bengal (13.51 percent) is observed to be very high and above the national average (6.60 percent). Hence, immediate attention is required in this respect. High repetition rate among primary grades in these states is because of very high repetition rate in Grade I. Most of the major states have reasonably lower repetition rate in primary grades. In as many as 15 states, the



Note: Map not to scale

Map 3.1

Table C17

Average Flow Rates : Primary Grades I-V, 2005-06*

State/UT	Promotion Rate			Repetition Rate			Dropout Rate		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Andhra Pradesh	91.53	91.37	91.45	3.10	3.17	3.13	5.37	5.46	5.42
Arunachal Pradesh	72.61	73.20	72.89	10.55	9.93	10.26	16.84	16.86	16.85
Assam	87.26	88.76	87.99	2.78	2.59	2.68	9.97	8.66	9.32
Bihar	78.68	80.62	79.54	10.77	11.57	11.13	10.55	7.81	9.34
Chhattisgarh	80.92	80.58	80.76	8.81	8.73	8.77	10.27	10.69	10.48
Daman & Diu	76.81	88.35	82.27	11.72	7.88	9.00	11.48	3.77	7.83
Goa	91.19	94.22	92.62	7.23	5.13	6.24	1.58	0.65	1.14
Gujarat	84.47	84.89	84.67	9.94	9.18	9.58	5.59	5.93	5.75
Haryana	78.57	82.47	80.43	7.97	7.26	7.63	13.46	10.27	11.94
Himachal Pradesh	94.39	94.98	94.67	3.70	3.24	3.48	1.91	1.79	1.85
Jammu & Kashmir	92.52	92.88	92.68	2.01	2.11	2.06	5.48	5.00	5.26
Jharkhand	81.89	82.97	82.40	9.49	9.54	9.51	8.62	7.49	8.09
Karnataka	91.37	91.47	91.42	1.88	1.79	1.83	6.75	6.75	6.75
Kerala	94.74	95.45	95.09	3.63	2.58	3.11	1.64	1.97	1.80
Madhya Pradesh	80.41	79.67	80.05	14.72	14.67	14.70	4.87	5.65	5.25
Maharashtra	87.81	88.20	88.00	6.12	5.59	5.86	6.07	6.21	6.14
Manipur	77.39	77.68	77.53	1.94	2.59	2.26	20.68	19.73	20.21
Meghalaya	75.53	76.84	76.19	5.48	4.61	5.04	18.99	18.56	18.77
Mizoram	90.68	89.76	90.23	4.40	4.09	4.25	4.92	6.15	5.52
Nagaland	92.81	92.39	92.60	4.51	4.08	4.30	2.69	3.53	3.10
Orissa	64.49	64.16	64.33	14.97	14.30	14.65	20.53	21.55	21.02
Punjab	89.85	90.81	90.29	8.30	6.38	7.41	1.86	2.81	2.30
Rajasthan	81.42	78.10	79.86	5.93	7.09	6.47	12.66	14.81	13.67
Sikkim	69.71	73.73	71.71	20.56	19.41	19.99	9.73	6.85	8.30
Tamil Nadu	97.35	97.73	97.54	0.97	0.86	0.92	1.67	1.41	1.54
Tripura	82.26	83.28	82.75	10.03	9.77	9.90	7.72	6.95	7.35
Uttar Pradesh	84.33	88.18	86.17	1.51	1.48	1.50	14.16	10.34	12.33
Uttarakhand	81.46	81.02	81.24	8.47	8.91	8.69	10.07	10.07	10.07
West Bengal	76.49	77.63	77.06	13.69	13.32	13.51	9.82	9.05	9.44
All Districts	**84.32**	**85.31**	**84.79**	**6.62**	**6.58**	**6.60**	**9.06**	**8.12**	**8.61**

* Based on common schools for the years 2005-06 & 2006-07.

average repetition rate reported in primary classes is lower than the average of all states (6.62 percent).

Figure 3.16
Average Flow Rates : Classes I-V, Cohort 2005-06
(Based on Common Schools)

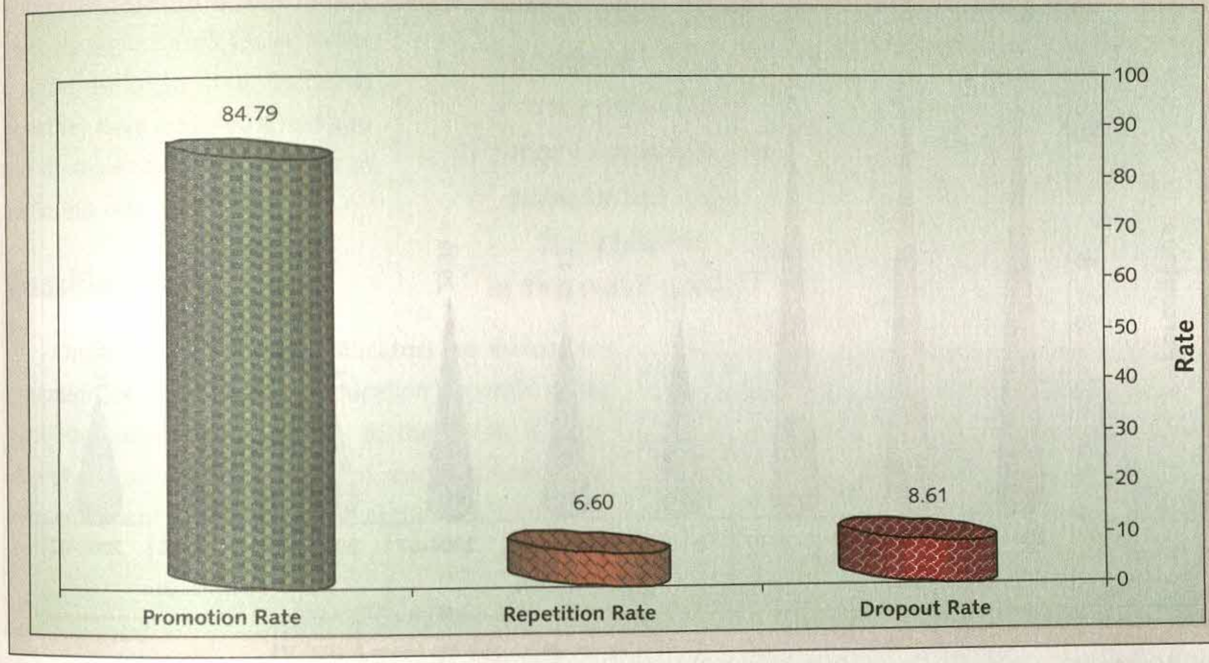


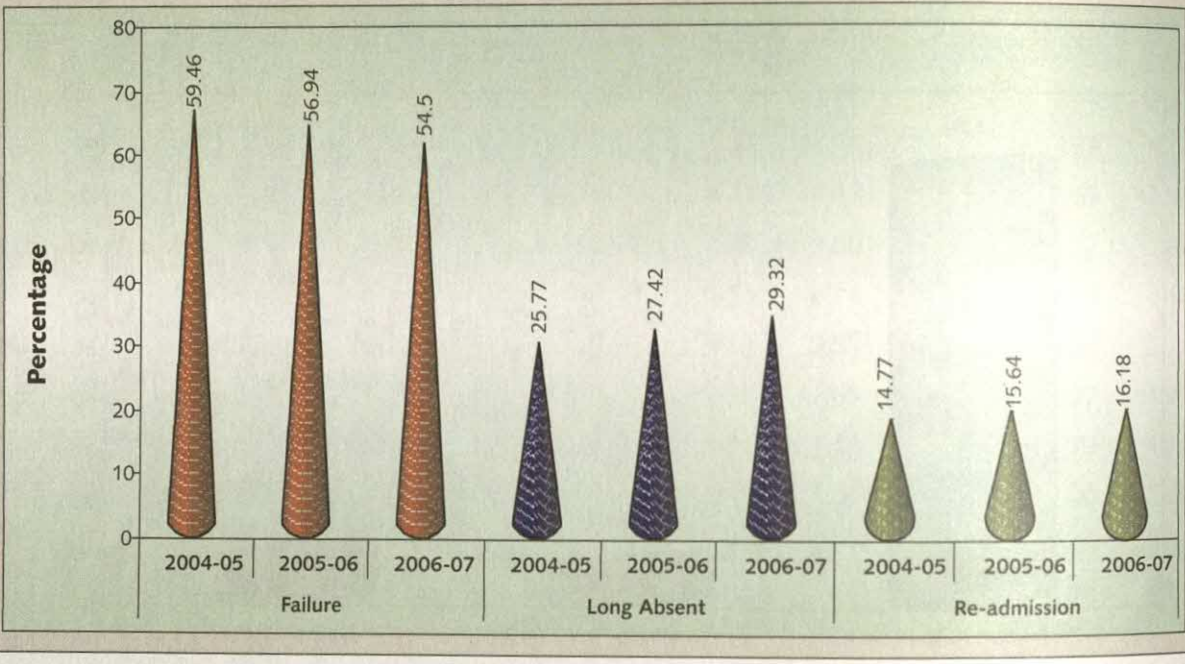
Table C18
Grade-Specific Number of Repeaters and Reasons of Repetition : 2006-07

Grade	Failures Percentage	Long Absent Percentage	Re-Admission Percentage	%age to Total Repeaters	Total Repeaters
I	41.82	37.72	20.46	27.81	3,21,4223
II	45.27	35.65	19.08	13.26	1,53,1959
III	50.07	33.49	16.43	11.46	1,32,4655
IV	51.78	32.73	15.50	9.20	1,06,2750
V	63.03	23.09	13.88	12.41	1,43,3927
VI	68.90	19.93	11.16	9.89	1,14,3293
VII	67.69	20.09	12.22	7.57	8,74,885
VIII	78.62	10.70	10.68	8.40	9,71,065
Total	**54.50**	**23.32**	**16.18**	**100.00**	**11,55,6757**

However, DISE data suggests that as many as 11.56 million (9.99 million in 2005-06) children repeated elementary grades in 2006-07 which is about 5.90 percent of total elementary enrolment. About 86 percent of the total repeaters were located in the rural areas and the balance 14 percent in the urban areas. Of the total repeaters, 53 percent were boys and the remaining 47 percent were girls. The distribution of repeaters by reasons further reveals that 6 out of 10 repeaters repeat on account of failure (54.50 percent). On the other hand, 23.32 percent repeat because of long absenteeism and another 16.18 percent because of re-admissions.

Figure 3.17

Percentage of Repeaters by Reasons to Total Repeaters : All States



Dropout Rate

The average dropout rate in primary classes over the last three cohorts suggests a consistent decline but the same is still too high to attain the status of universal retention at the Primary level of education. As has already been mentioned above, the dropout rate computed in the present study does not present the true picture of retention as it is just based on enrolment data of only 2 years instead of 5 years used in computing conventional retention rate at Primary level.

"An average dropout rate of 8.61 percent in primary grades during intermediary years 2005-06 and 2006-07 indicates a high dropout rate at Primary level over a period of five years"

The dropout rate presented in Table C17 for cohort 2005-06 indicates an average drop-out rate of 8.61 percent in primary grades against 9.96 percent during the previous cohort i.e. 2004-05. This shows that during the intermediary years 2005-06 and 2006-07, as many as 8.61 percent children enrolled in Grades I to V dropped out from the system before completing the primary grades as against 9.96 percent during intermediary years 2004-05 and 2005-06. The high incidence of dropout in the primary grades is also evident in the apparent survival rates presented above.

An average dropout rate of 8.61 percent in primary grades during intermediary years 2005-06 and 2006-07 indicates a high dropout rate at Primary level over a period of five years. Consequently, it also indicates a low retention rate at the Primary level of education. On the one hand, a few states reported low average dropout rate than the average of all states, while the some other states reported higher dropout rates. Arunachal Pradesh reported a high dropout rate of 16.85 percent compared to 13.67 percent in Rajasthan, 21.02 percent in Orissa, 11.94 percent in Haryana, 18.77 percent in Meghalaya, 20.21 percent in Manipur, 12.33 percent in Uttar Pradesh and 9.34 percent in Bihar. Except Arunachal Pradesh, Manipur and Meghalaya, all these other states are big states and crucial for the country to attain the status of universal retention at the Primary level of education. Kerala with 1.80 percent, Tamil Nadu with 1.54 percent and Himachal Pradesh with 1.85 percent dropout rate have almost achieved the goal of universal retention at Primary level. Experience of these states may be useful to other states as how they have achieved it and also the strategies adopted by them to attain this rate.

"Almost every child in the urban areas transited from Primary to Upper Primary level but the same is not true for children in the rural areas"

Transition Rate

One of the important indicators on which the expansion of upper primary education depends is the transition rate from the Primary to the Upper Primary level of education. The number of repeaters subtracted from enrolment in Grade VI or V, as the case may be, in 2006-07, divided by enrolment in Grade V or IV in the previous year (2005-06) and multiplied by 100 gave the transition rate for cohort 2005-06. The transition rate presented in Table C19 shows consistent improvement over a period of time but still a good percentage of children drop out in transition. As many as 83.72 percent children across 35 States & UTs transited from Primary to Upper Primary level of education compared to 82.24 percent in the previous year. Though transition rate shows improvement but still about 17 percent children dropout in transition. Further, a significant deviation is observed in children transitioning in the rural and urban areas. Almost every child in the urban areas transited from Primary to Upper Primary level but the same is not true for children in the rural areas. As compared to 78.78 percent in the rural areas, almost all children transited in the urban areas. Further, no significant difference in transition rate is noticed in case of boys and girls and the same has shown improvement from its previous levels. Against 84.59 percent boys and 82.75 percent girls transiting from Primary to Upper Primary level of education in 2005-06, 83.66 percent boys and 80.64 percent girls transited during the previous year i.e. 2004-05.

Table C19

Transition Rate from Primary (V/VI) to Upper Primary (V/VI) Level of Education, Cohorts : 2002-03 to 2005-06

Cohort	Number of Districts	Boys	Girls	Total
2002-03	461	65.96	62.73	64.48
2003-04	539	79.96	75.78	78.01
2004-05	581	83.66	80.64	82.24
2005-06, All Areas	**604**	**84.59**	**82.75**	**83.72**
Rural Areas	604	79.83	77.60	78.78

Further, a significant deviation is noticed when state-specific transition rates are analysed. From Table C20, we find that against a low transition rate of 65.50 percent in rural Bihar, 64.41 percent in Uttar Pradesh, 73.44 percent in Jharkhand and 57.73 percent in Madhya Pradesh in 2005-06, the same is very high in case of Andhra Pradesh, Arunachal Pradesh, Chandigarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra and Tamil Nadu. A few states, including Kerala and Karnataka reported above hundred percent transition rates. In Uttar Pradesh, only 64.38 percent boys and 65.55 percent girls transited from Primary to Upper Primary level of education in 2005-06 (Table C20). As mentioned above, Bihar too reported a low transition rate of 66.96 percent in case of boys and 67.33 percent of girls. Bihar reported a low of 65.50 percent transition rate in rural areas compared to 86.15

percent in the urban areas. Other major states that need immediate attention of planners are Madhya Pradesh (67.03 percent) and Jharkhand (77.76 percent). A few states from the north-eastern part of the country (Sikkim and Tripura) reported lower transition rates than the average of all states (82.75 percent). As it seems, the goal of universal elementary education in states mentioned above may not perhaps be realised in the near future if transition rates are not improved significantly. The states should find out reasons of low transition, which should be followed by incorporating reason-specific strategies in the Annual Work Plan. In a few states, such as Rajasthan, significant difference is noticed in case of transition

Table C20

State-Specific Transition Rate from Primary (IV/V) to Upper Primary (V/VI)* Level of Education : Cohort 2005-06

State/UT**	Boys	Girls	Total	Rural Areas
Andhra Pradesh	92.59	89.51	91.07	86.55
Arunachal Pradesh	90.21	90.34	90.27	83.60
Bihar	66.96	67.33	67.11	65.50
Chandigarh	97.97	93.02	95.72	82.82
Chhattisgarh	72.54	71.64	72.11	72.10
Daman & Diu	71.12	76.59	73.63	59.24
Goa	88.92	87.53	88.29	87.14
Gujarat	93.76	90.18	92.07	87.83
Haryana	93.95	96.30	95.07	89.48
Himachal Pradesh	96.77	92.64	94.80	91.42
Jammu & Kashmir	98.53	96.21	97.48	94.87
Jharkhand	77.22	78.42	77.76	73.44
Lakshadweep	75.86	88.62	81.47	78.23
Madhya Pradesh	69.84	63.92	67.03	57.73
Maharashtra	94.89	92.67	93.83	87.61
Manipur	89.63	89.87	89.74	85.74
Orissa	90.13	85.61	87.95	88.08
Rajasthan	90.26	77.70	84.71	79.83
Sikkim	72.72	79.32	76.17	74.01
Tamil Nadu	98.16	96.36	97.30	91.94
Tripura	78.20	80.23	79.16	75.05
Uttar Pradesh	64.38	65.55	64.93	64.41
Uttarakhand	82.45	79.69	81.08	77.85
West Bengal	89.25	87.32	88.28	82.04
All States	**84.59**	**82.75**	**83.72**	**78.78**

* As the case may be.

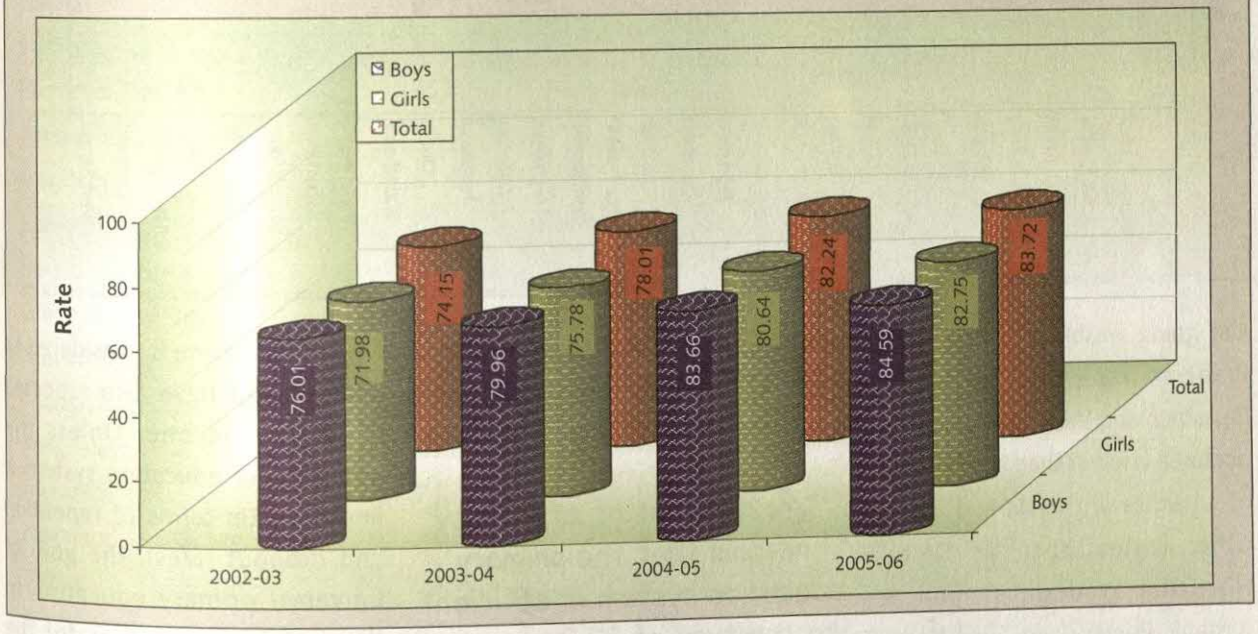
** States reporting above 100 are not presented which may be because of inconsistent enrolment data or migration of children into that state at the Grade VI level.

rate of boys and girls. In Rajasthan only 77.70 percent girls transited from Primary to Upper Primary level against 90.26 percent boys, which shows a gap of about 13 percentage points. But in about 10 states, including Bihar, Haryana, Jharkhand and Uttar Pradesh, the same is observed to be slightly higher in case of girls. Similarly, states also need to bridge the gap in children transiting from Primary to Upper Primary level in the rural and urban areas.

> "States should find out reasons of low transition, which should be followed by incorporating reason-specific strategies in the Annual Work Plan. In a few states, such as Rajasthan, significant difference is noticed in case of transition rate of boys and girls"

Figure 3.18

Transition Rate from Primary (Grade V) to Upper Primary Level (Grade VI) : All States



Internal Efficiency of Primary Education System

The flow rates presented above fail to produce information on internal efficiency of the education system. In simple terms, efficiency can be defined as an optimal relationship between investment in terms of input years and output in terms of number of graduates the system produces. By using the following assumptions, the *Reconstructed Cohort Method* is used to obtain indicators of internal efficiency of an education system. Input-Output Ratio, Coefficient of Efficiency and Input per Graduate have been presented for which two years enrolment and one year repeaters data in the current year are used. Coefficient of efficiency is defined as the ratio of actual number of pupil-years to the ideal number of pupil-years. Ratio closer to one means better internal efficiency. The input-output ratio is simply the inverse of coefficient of efficiency, and is equal to years put in per graduate divided by five which is the length of the primary cycle. The assumptions used are as follows:

- Promotion, repetition and dropout rates presented above (*based on DISE 2005-06 and 2006-07 data*) would remain constant throughout the evolution of the cohort;
- A student would not be allowed to continue in the system after he/she has repeated for three times in a grade; thereafter, he/she will either leave the system or would be promoted to the next higher grade; and

- No students other than the original ones would be allowed to enter the cycle in between the system.

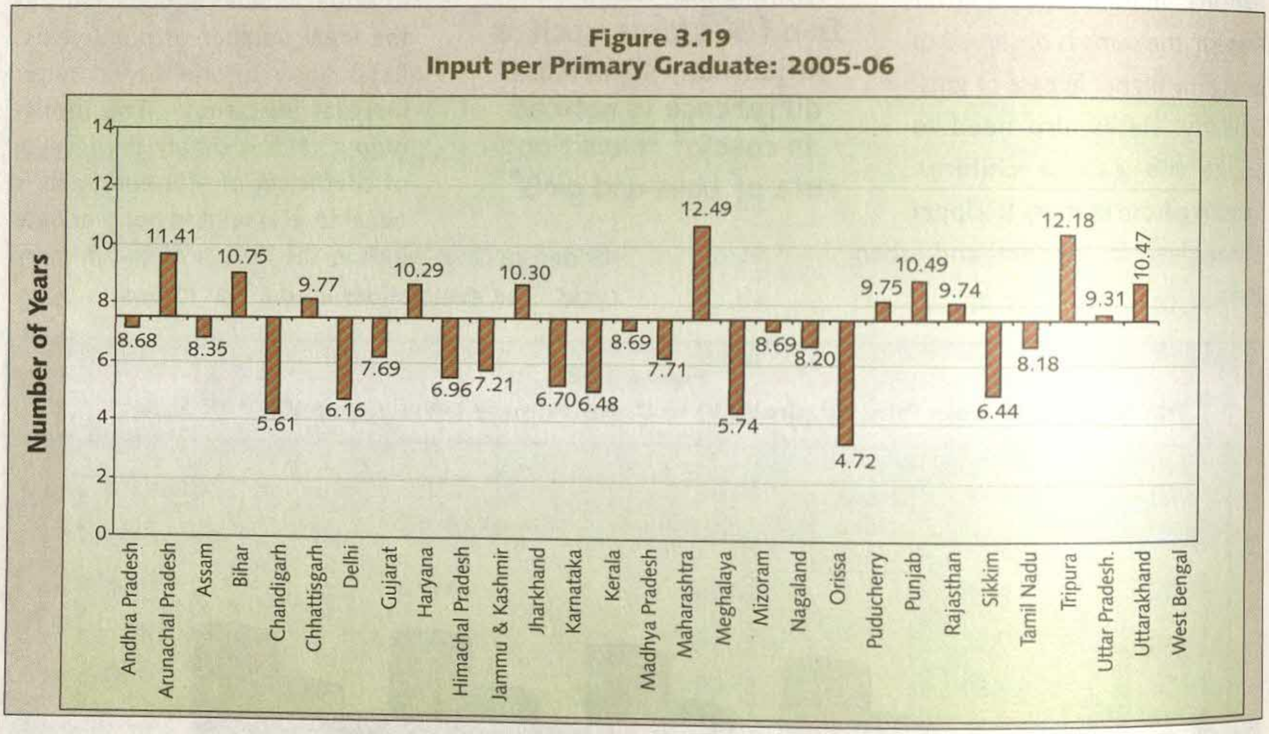


Figure 3.19
Input per Primary Graduate: 2005-06

The coefficient of efficiency presented below reveals that the primary education system is efficient to the tune of 82.2 percent. There is, therefore, scope for further improvement as about 18 percent of the total resources (in terms of input years and outcomes) are just going waste. In a few states, such as Arunachal Pradesh, Assam, Chhattisgarh, Haryana, Orissa, Rajasthan and West Bengal, the coefficient of efficiency obtained is lower than the average of all states. In Kerala and a few other states, such as Delhi, Himachal Pradesh, Jammu & Kashmir, Punjab, and Tamil Nadu, the primary education system seems to be an efficient one (90 and above). Primary education system in Tamil Nadu is almost perfect as it has a high coefficient of efficiency of 97.5; it is as good as 93.1 in Kerala and 95.0 in Himachal Pradesh. On an average, a primary graduate is taking 6.1 years to become graduate, compared to an ideal of 5 years. Students in a few states, such as Daman & Diu, Meghalaya, Mizoram, Orissa and Sikkim are taking 7 and more years to graduate primary level. This is also reflected in the input-output ratio which means a student is taking more than one and half time (in terms of years) resources in these states to become primary school graduate. In case of no wastage in the system, a ratio of one is considered to be the ideal one. Many states have also reported input-output ratio well above one. Unless the efficiency of education system is improved (in terms of repetition and dropout rates), the goal of universal primary education in these states, as well as for the country as a whole, may not be realised in the near future.

> "Coefficient of efficiency reveals that the primary education system is efficient to the tune of 82.2 percent. There is, scope for further improvement as about 18 percent of the total resources are just going waste"

Percentage of Over-Age and Under-age Children

One of the important variables required in planning on which information is generally not available from other regular sources, is the age-and-grade matrix which

Table C21

Indicators of Internal Efficiency : Cohort 2005-06

(Based on Common Schools for the Year 2005-06 and 2006-07)

State/UT	Coefficient of Efficiency	Years Input per Graduate			Input–Output Ratio
		Boys	Girls	Total	
Andhra Pradesh	88.6	5.7	5.6	5.6	1.1
Andaman & Nicobar Islands	98.4	5.3	4.9	5.1	1.0
Arunachal Pradesh	66.6	7.5	7.5	7.5	1.5
Assam	76.1	6.6	6.5	6.6	1.3
Bihar	83.9	6.0	5.8	6.0	1.2
Chhattisgarh	77.8	6.5	6.4	6.5	1.3
Dadra & Nagar Haveli	95.8	5.1	5.5	5.2	1.0
Daman & Diu	71.7	7.7	6.3	7.0	1.4
Delhi	99.8	4.9	5.1	5.0	1.0
Goa	97.1	5.2	5.1	5.2	1.0
Gujarat	80.1	6.3	6.2	6.2	1.2
Haryana	75.6	6.8	6.4	6.6	1.3
Himachal Pradesh	95.0	5.3	5.3	5.3	1.1
Jammu & Kashmir	91.1	5.5	5.4	5.5	1.1
Jharkhand	83.6	6.0	5.9	6.0	1.2
Karnataka	87.2	5.7	5.7	5.7	1.1
Kerala	93.1	5.4	5.4	5.4	1.1
Madhya Pradesh	83.5	5.9	6.0	6.0	1.2
Maharashtra	82.0	6.1	6.1	6.1	1.2
Manipur	72.8	6.9	6.8	6.9	1.4
Meghalaya	65.5	7.8	7.5	7.6	1.5
Mizoram	71.7	5.0	5.1	7.0	1.4
Nagaland	81.5	6.1	6.1	6.1	1.2
Orissa	53.9	9.2	9.4	9.3	1.9
Punjab	90.0	5.6	5.5	5.6	1.1
Rajasthan	73.5	6.7	7.0	6.8	1.4
Sikkim	63.5	8.3	7.5	7.9	1.6
Tamil Nadu	97.5	5.1	5.1	5.1	1.0
Tripura	79.5	6.3	6.2	6.3	1.3
Uttar Pradesh	83.3	6.2	5.8	6.0	1.2
Uttarakhand	78.2	6.4	6.4	6.4	1.3
West Bengal	71.9	6.9	7.0	7.0	1.4
All States	**82.2**	**6.1**	**6.0**	**6.1**	**1.2**

has serious implications for planning UEE. However, data on age-and-grade matrix is being collected regularly ever since the inception of DISE. The data is presented separately in case of Primary and Upper Primary levels of education and also for boys and girls. Total grossness is divided into two parts, namely under-age and over-age children in the total enrolment. Table C22 reveals that the percentage of over-age and under-age children both at the Primary and Upper Primary levels of education has slightly increased in 2006-07 from its 2005-06 position. The percentage of over-age and under-age children increased to 15.65 percent in 2006-07 from 14.57 percent in 2005-06 (Primary), and to 20.76 percent in

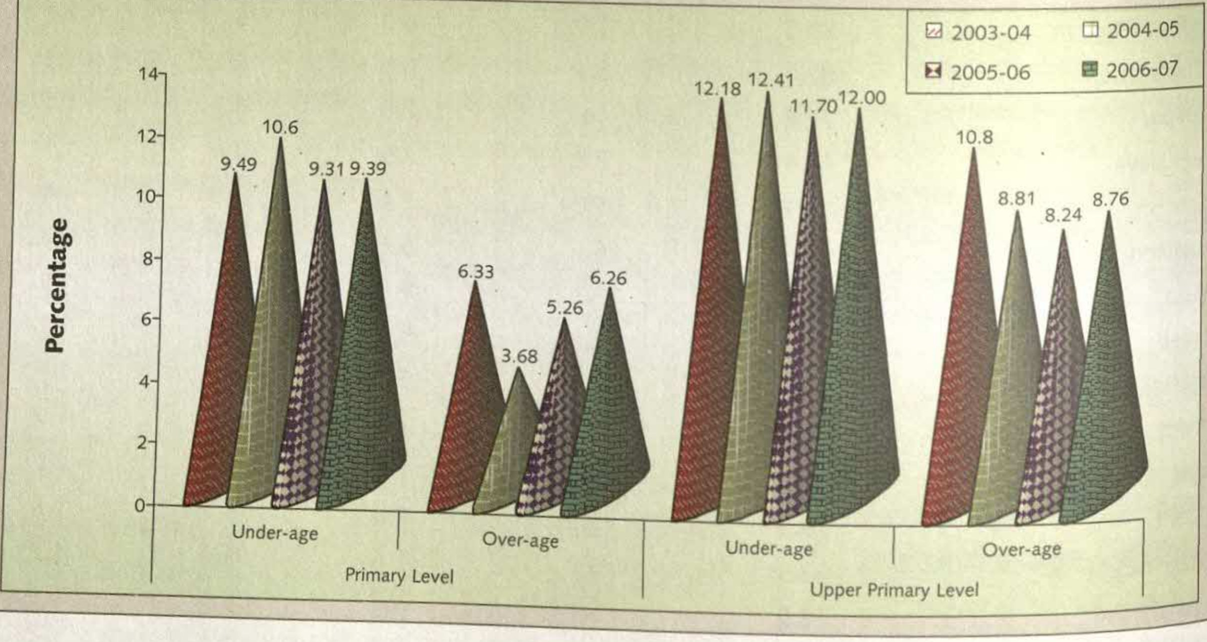
Table C22

Under-age and Over-age Children : 2006-07

Educational Level	All Areas			Rural Areas			Urban Areas		
	Under –age	Over –age	Total Grossness*	Under –age	Over –age	Total Grossness	Under –age	Over –age	Total Grossness
Primary Level									
Boys	9.46	6.22	15.68	8.99	6.25	15.24	11.56	6.11	17.67
Girls	9.31	6.30	15.61	8.86	6.32	15.18	11.32	6.24	17.56
Total	**9.39**	**6.26**	**15.65**	**8.93**	**6.28**	**15.21**	**11.45**	**6.17**	**17.62**
Upper Primary Level									
Boys	12.71	7.59	20.30	12.26	7.78	20.04	14.16	7.03	21.19
Girls	11.28	9.93	21.21	10.81	9.96	20.77	12.77	9.88	22.65
Total	**12.00**	**8.76**	**20.76**	**11.53**	**8.87**	**20.40**	**13.47**	**8.46**	**21.93**

* Total of over-age and under-age children.

Figure 3.20
Percentage of Under-age & Over-age Children : All States



2006-07 from 19.94 percent in 2005-06 (Upper Primary). This is also true separately for boys and girls and also for rural and urban areas. Further, it is found that the percentage of over-age and under-age children in case of Upper Primary level (20.76 percent) is much higher than in case of the Primary level of education (15.65 percent). Quite a similar trend is also observed in the previous year. However, no significant deviation is noticed between boys and girls in respective levels. This is generally also true for rural and urban areas and between boys and girls in these areas.

> "Percentage of over-age and under-age children suggests that of the total enrolment in Primary classes, 84.35 percent belong to 6-11 years age group and the rest of the children are either below 6 or above 11 years old"

Table C23
Enrolment and GER at Primary Level

Year	Number of Districts Covered	Number of States Covered	Number of Schools Covered	Enrolment in Primary Grades I-V (In Million)	GER	NER
					(%)	
2002-03	459	18	8,56,301	101.16	–	–
2003-04	539	25	9,31,471	110.39	89.83	–
2004-05	581	29	10,37,813	118.30	97.82	–
2005-06*	604	35	11,24,033	124.62	103.77	84.53
2006-07*	**609**	**35**	**11,96,663**	**131.85**	**110.86**	**92.75**

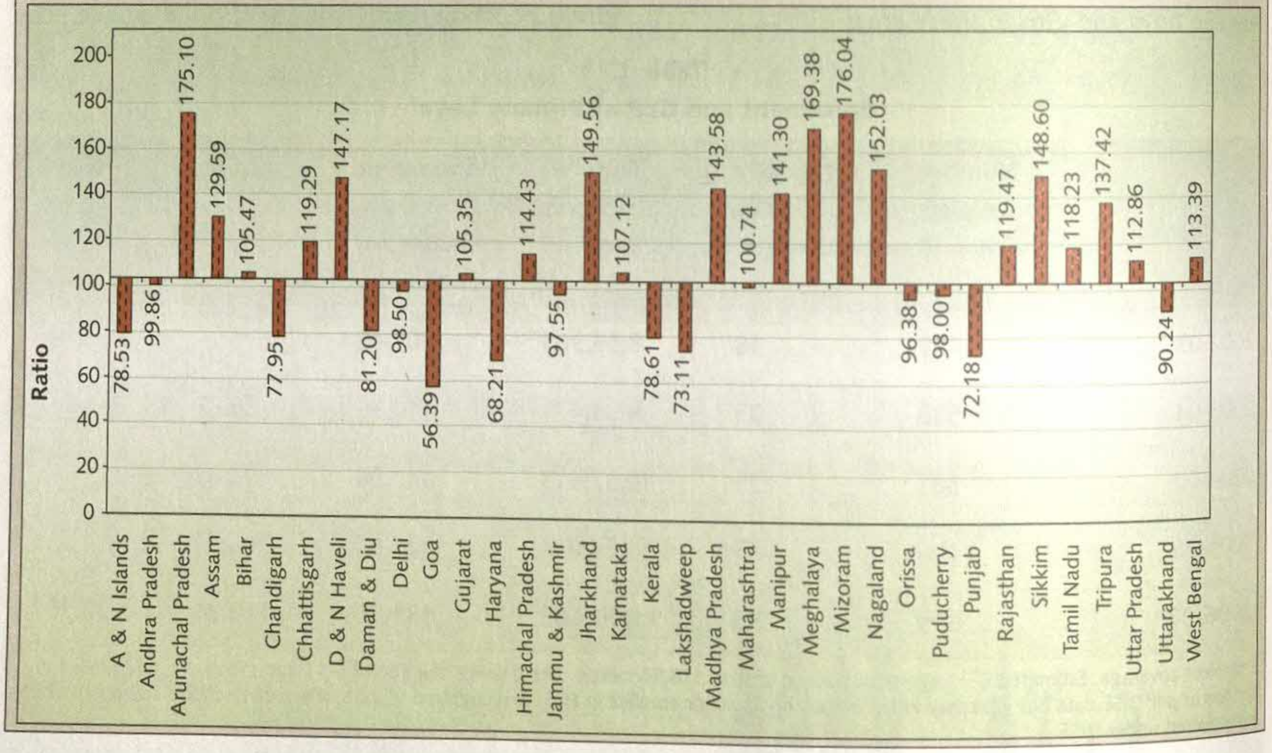
* Complete coverage. Estimated 6-11 age population is around 118.94 million. The balance children of 6-11 age-group are not enrolled in schools as per DISE data but who may either be out-of-school or enrolled in EGS, unrecognized schools, alternative schools and other schools not covered under DISE.

The percentage of over-age and under-age children suggests that of the total enrolment in Primary classes, 84.35 percent belong to 6-11 years age group and the rest of the children are either below 6 or above 11 years old. Further, it is noticed that the number of under-age children (9.39 percent) in overall grossness in primary classes is more than the number of over-age children (6.26 percent), which is true both for boys and girls. Almost similar trend is noticed in the case of primary enrolment in rural areas. However, the percentage of under-age children in urban areas is a bit higher than the same in rural areas. Compared to 12.00 percent under-age children at Upper Primary level, the percentage of over-age children is 8.76. Altogether the percentage of over-age and under-age children in primary classes located in urban areas is 17.62, and in rural areas it is 15.21. Comparative percentage of over-age and under-age children at the Upper Primary level is much higher at 20.76. This means that only 79.24 percent enrolment in Upper Primary classes are of 11-14 years age group. The total grossness in case of boys (20.30 percent) is slightly lower than the same in case of girls (21.21 percent). As mentioned above, the percentage of under-age children (12.00 percent) in Upper Primary enrolment too is higher than the over-age children (8.76 percent); it is also true both for rural and urban areas and for boys and girls. However, the percentage of under-age children in urban areas (13.47 percent) is higher than the same in rural areas (11.45 percent)

Enrolment Ratio

Every year, not only number of schools covered under DISE has increased but the enrolment both in the Primary and Upper Primary classes has also increased impressively. This shows the impact of recent initiatives, like the *Sarva Shiksha Abhiyan* Programme. The enrolment in Primary classes in 2005-06 was 124.62 million showing an increase of 7.23 million in absolute terms and 5.80 in percent points over the enrolment in the previous year. Despite the increase in enrolment over a period of time, it is observed that about 179 out of 604 districts reported decline in Primary enrolment.

Figure 3.21
GER at Primary Level



One of the crucial indicators through which the goal of universal enrolment is assessed is enrolment ratio. It has been presented at the Primary level in Table C23 at the national level, and the state-specific data is given in Table C24. It may be noted that irrespective of the school structure, enrolment ratio at Primary level is computed by considering enrolment in Grades I-V and corresponding age-specific population, i.e. 6-11 years. In the year 2005-06, during which all the districts of the country across 35 States and UTs were covered under DISE, information from more than 1.20 million institutions was received. As per the DISE 2006-07 data, GER at Primary level is estimated to be 110.86 percent, corresponding to 92.75 percent NER (Table C23). The GER in the previous year 2005-06 was 103.77 percent. Because of the limitations mentioned (Section I) in the Upper Primary enrolment, a number of states, because of their school structure, did not report enrolment in Grade VIII. As such, enrolment in Upper Primary grades reported under DISE does not represent the true coverage. Hence, GER computed for Upper Primary level (64.72 percent) is found much lower than at the Primary level.

It has also been observed that NER in a good number of states in 2006-07 is much higher than the average of all states (92.75 percent). Contrary to general belief, the NER at the Primary level in Kerala is low which is because of the incomplete coverage of schools in the state. Despite significant achievement in a few states, some other states remained far behind, reporting a low NER. Unless all the remaining children are brought under the education system, the goal of universal enrolment is not likely to be realized in the near future. The enrolment ratio, however, also reveals that a few states, such as Himachal Pradesh, Karnataka and Tamil Nadu, are near

Table C24
Enrolment Ratio at Primary Level : 2004-05 to 2006-07

State/UT	GER			NER		
	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
Andaman & Nicobar Islands	–	70.83	78.53	–	–	62.42
Andhra Pradesh	96.54	96.84	99.86	75.58	75.28	78.06
Arunachal Pradesh	106.19	153.94	175.10	80.48	–	–
Assam	99.92	96.65	129.59	87.78	88.84	88.84*
Bihar	91.05	92.44	105.47	81.97	–	99.46
Chandigarh	80.59	72.55	77.95	66.09	59.31	63.65
Chhattisgarh	108.78	131.48	119.29	90.09	–	98.71
Dadra & Nagar Haveli	–	123.73	147.17	–	93.82	93.82*
Daman & Diu	82.90	85.70	81.20	57.89	70.11	64.04
Delhi	95.68	89.57	98.50	75.91	65.81	72.37
Goa	59.08	54.12	56.39	47.92	48.17	49.57
Gujarat	109.35	100.30	105.35	85.66	78.89	84.03
Haryana	79.13	57.90	68.21	64.08	38.08	53.71
Himachal Pradesh	89.00	110.53	114.43	79.54	87.29	91.72
Jammu & Kashmir**	105.95	94.40	97.55	95.58	75.86	80.54
Jharkhand	76.44	123.58	149.56	64.12	63.66	63.66*
Karnataka	116.28	93.58	107.12	89.73	83.97	98.60
Kerala***	84.31	76.16	78.61	69.45	–	66.63
Lakshadweep	–	87.39	73.11	–	–	67.70
Madhya Pradesh	127.56	129.76	143.58	94.64	94.22	94.22*
Maharashtra	157.91	96.82	100.74	117.89	–	84.00
Manipur	115.16	132.10	141.30	97.52	–	–
Meghalaya	116.14	132.83	169.38	94.33	94.01	94.01*
Mizoram	61.81	155.76	176.04	64.96	–	–
Nagaland	73.16	133.13	152.03	58.37	–	–
Orissa	100.20	117.38	96.38	72.95	94.05	71.71
Puducherry	143.19	79.54	98.00	86.94	56.66	80.29
Punjab	114.83	65.34	72.18	94.14	51.78	55.49
Rajasthan	138.29	112.72	119.47	121.80	81.52	84.59
Sikkim	98.33	138.00	148.60	90.00	94.54	90.65
Tamil Nadu	86.81	118.58	118.23	82.81	93.92	96.61
Tripura	106.57	133.40	137.42	85.72	–	–
Uttar Pradesh	97.82	107.27	112.86	81.90	97.74	97.74*
Uttarakhand	–	97.00	90.24	–	83.32	76.59
West Bengal	–	104.45	113.39	–	82.76	84.47
All States	–	**103.77**	**110.86**	–	**84.53**	**92.75**

* 2005-06.

** Partial data in 2004-05.

*** Data not fully reported, In addition, a large number of unrecognised schools, that the state has, are not covered under DISE.

achieving the goal of universal elementary enrolment. A little push in these states may help in achieving goal of universal elementary enrolment.

Examination Results

The last, though the most important component of Universal Elementary Education, is Universal Quality of Education. A variety of indicators presented above give information about the qualitative aspects of education system. In India, the Learners' Achievement is considered to be one of the significant indicators of quality of education. However, there is no mechanism to collect information on Learners' Achievement on regular basis. For the first time, Baseline Learners' Assessment Studies (BAS) were conduced in 1994-95 in seven DPEP phase-one states. Thereafter, the same was extended to DPEP phase-two and phase-three districts also, but the coverage was limited only to Primary grades. Subsequently, the mid-term and terminal assessment studies were also conducted in the DPEP states. The coverage under the SSA was extended to Upper Primary grades also. NCERT has recently conducted a study on learners' attainment both in case of Primary and Upper Primary grades. Examination results conducted by schools are, however, considered as one of the proxy indicators of quality of education which is collected under DISE every year.

A cursory look at the examination results shows that, barring a few states, more than 90 percent children passed the terminal Grades IV/V and VII/VIII (Table C25). The pass percentage in case of Grade V is as high as 95, both in case of boys and girls. Except Madhya Pradesh (boys 75.39 percent; and girls 73.24 percent) and Sikkim (boys 73.42 percent; and girls 73.47 percent), in most of the other states, the pass percentage in Grade V is observed to be above 90 percent, which is true both for boys and girls. Further, it is observed that the pass percentage in Grade VIII (boys, 88.19 percent; girls 88.58 percent) has been comparatively lower than the pass percentage in Grade V. It is noticed that almost an equal percentage of children passed terminal Grades V and VIII, both in rural and urban areas; it is also

Table C25

Examination Results in the Terminal Grades : Cohort 2005-06

Terminal Grade	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
Pass Percentage					
Grade IV/V					
Boys	94.80	94.74	95.02	94.49	95.77
Girls	94.89	94.76	95.40	94.54	96.2
Grade VII/VIII					
Boys	88.44	88.19	89.22	87.15	90.40
Girls	88.84	88.58	89.56	87.81	90.49
Pass Percentage (60% & Above Marks)					
Grade IV/V					
Boys	44.96	42.66	54.75	38.74	54.94
Girls	45.12	42.32	56.71	39.08	56.78
Grade VII/VIII					
Boys	38.83	36.42	45.98	30.95	39.47
Girls	40.06	37.35	47.35	33.16	39.52

true for all government and private management schools for Primary grade only. However, the pass percentage in Grade VII/VIII in schools run by the private managements has been a bit higher than the same in the government run schools.

Figure 3.22

Percentage of Children Passed with ≥60 Percent Marks by Management

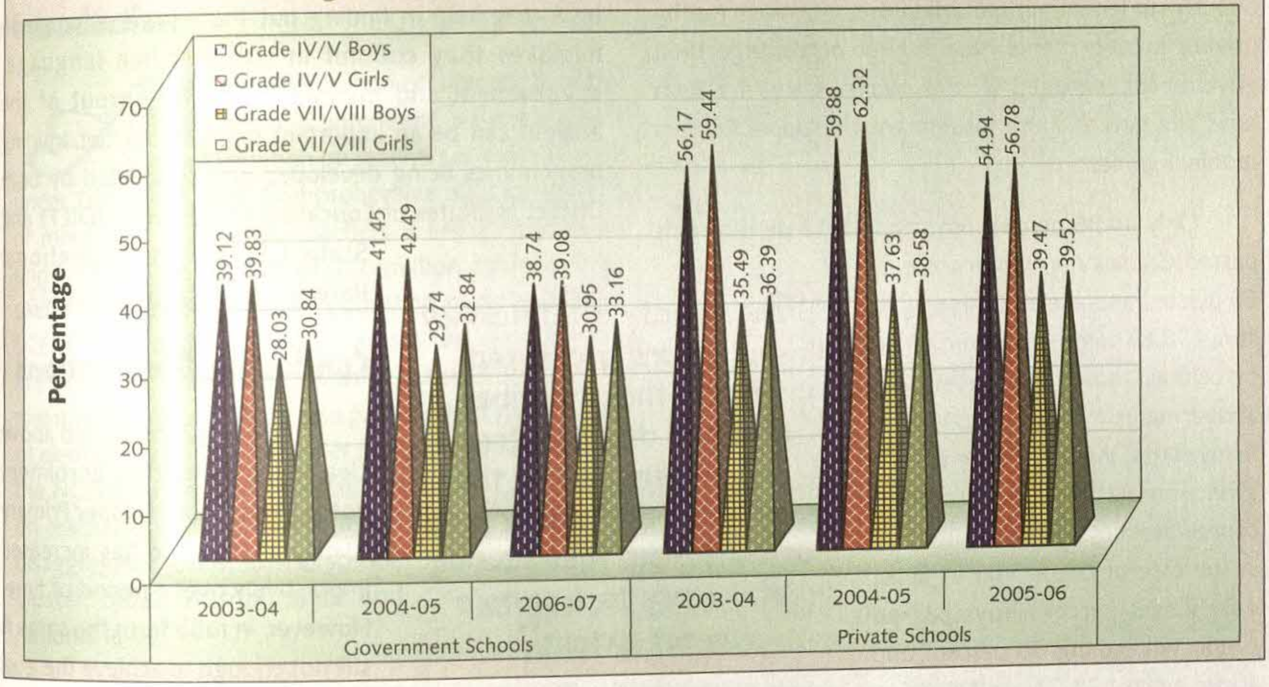
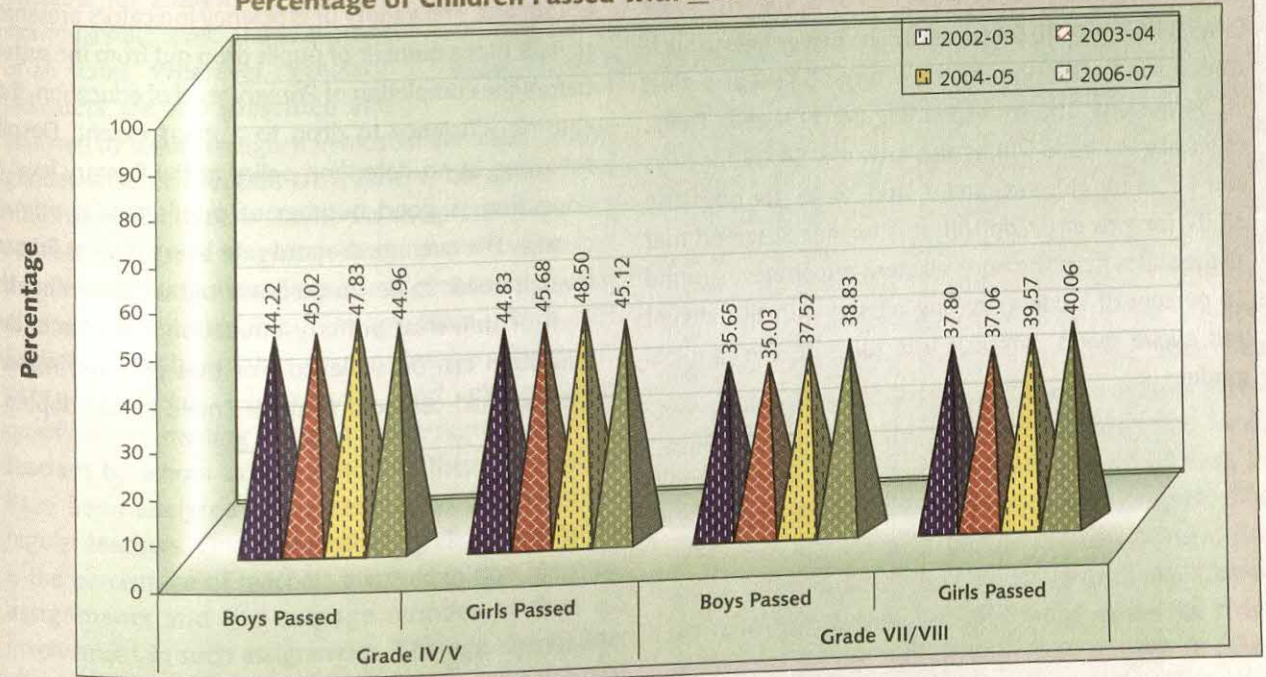


Figure 3.23

Percentage of Children Passed with ≥60 Percent Marks : All States



Percentage of children passing with 60 percent and above marks has also been analysed both for Grade IV/V and Grade VII/VIII. A decline is observed in both the cases. This clearly indicates that the learners' attainment both in the case of Grade IV/V and Grade

VII/VIII, is not satisfactory. This agrees with the outcome of independent assessment studies conducted in the recent past. A significant difference is, however, noticed in students passing with 60 and above marks in rural and urban areas. Rural areas have much lower percentage of such students than the urban areas. Schools run by private managements have higher percentage than government managed schools, which is true for both boys and girls and also for Primary and Upper Primary terminal grades.

Only 44.96 percent boys and 45.12 percent girls passed Grade IV/V with a score of 60 percent and above, compared to about 38.83 percent boys and 40.06 percent girls scoring 60 percent and above marks in Grade VII/VIII. In many states, the percentage of such girls is much higher than their counterpart boys, which is also true in the case of Grade VIII. In Bihar, only 22.03 percent boys passed Grade VIII scoring 60 percent and above against 23.77 percent girls. Even in the state of Kerala, the percentage of students who passed with 60 percent and above marks, especially in Grade VII, is low (boys 34.67; girls 40.07 percent). The percentage of such students in Grade IV in Kerala is boys, 54.90 and girls, 58.34 percent. The corresponding percentage in Delhi, especially in Grade VIII, is also low. It is 54.89 for boys and 63.29 for girls in Grade V; and 34.45 for boys and 33.07 for girls in Grade VIII. It is further observed that all the states from the north-eastern region have around 25 percent of students having passed with 60 percent and above marks, which is true for both the terminal grades.

> "The variety of efficiency indicators presented reveals that a number of pupils drop out from the system before the completion of Primary level of education; thus causing efficiency to drop to a great extent"

In view of the above analysis, it is obvious that the programmes concerning elementary education initiated recently focus more on quality of education than on the other components of universalisation. A careful analysis of students' responses in examinations/achievement tests may help in finding out the nature of common mistakes they commit in subjects like language, environment and mathematics. The output of the analysis can be an important input to teacher training programmes being developed and conducted by both District Institutes of Education and Training (DIET) and State Councils of Educational Research and Training (SCERT).

Concluding Observations

The analysis presented above clearly indicates that enrolment both at Primary and Upper Primary levels of education has increased impressively over a period of time. However, in ratio form the same is still not enough to achieve the goal of universal elementary education. There are a few states which are at the verge of achieving universal primary enrolment. The variety of efficiency indicators presented reveals that a number of pupils drop out from the system before the completion of Primary level of education, thus causing efficiency to drop to a great extent. Despite following of no-detention policy at the Primary level of education, a good number of pupils repeat primary classes. The average dropout rate being high at Primary level, it needs to be checked without which neither the goal of universal primary education nor elementary education can be achieved. For that purpose, reason-specific child-centered strategies need to be adopted.

Teacher-Related Indicators

Introduction

Apart from information on schools, facilities in schools and enrolment, a good amount of information on teachers is also collected under DISE each year. Comprehensive data on profiles of more than 5.2 million teachers is being maintained under DISE. This rich set of information could well be useful in developing teacher education plans by NCERT, SCERT, DIET and BRC faculty across the country who are its potential users. Many teacher indicators maintained under DISE are also part of monitoring quality of elementary education under SSA being developed by the NCERT. If needed, information on teachers can also be obtained at disaggregated levels, such as school, cluster, block, district, state and national level.

The following set of indicators with respect to teachers has been available for analysis both at the individual state levels and as average of all states. Wherever necessary, indicators are also presented and analysed by school category. In most of the cases, besides gender-wise distribution of teachers, comprehensive information about *para*-teachers is also presented which renders DISE as a singular source that disseminates detailed information on all aspects of *para*-teachers, that otherwise is not available from any other source. This Section presents number of *para*-teachers by school category, their educational and professional qualifications, training status, average number of *para*-teachers by school category etc. All these parameters have been analysed and presented as also those of regular teachers. One of the other significant indicators is the percentage of teachers involved in non-teaching assignments and the average number of days of involvement in such assignments. The age distribution of teachers can also be of great help in planning for teachers' requirement and recruitment in years to come. Among other variables, the following deserve special mention: number of teachers by age and sex, and by school category; teachers profile by caste; number of teachers provided in-service training; pupil-teacher ratio; average number of teachers by school category; percentage of female teachers; types of teachers etc..

> “Number of teachers distributed by school category suggests that about 5.22 million teachers are engaged in teaching in schools, imparting elementary education in the country”

Number of Teachers

With ever improving coverage of schools and districts under DISE each year, the number of teachers has also increased significantly. A consistent increase in the number of teachers from 2003-04 to 2006-07 is observed which is true in case of most of the States & UTs covered under DISE. Number of teachers distributed by school category in 2006-07 suggests that about 5.22 million (against 4.69 million in 2005-06) teachers are engaged in teaching in schools, imparting elementary education in the country. About 78 percent teachers are located in rural areas in 87 percent of schools.

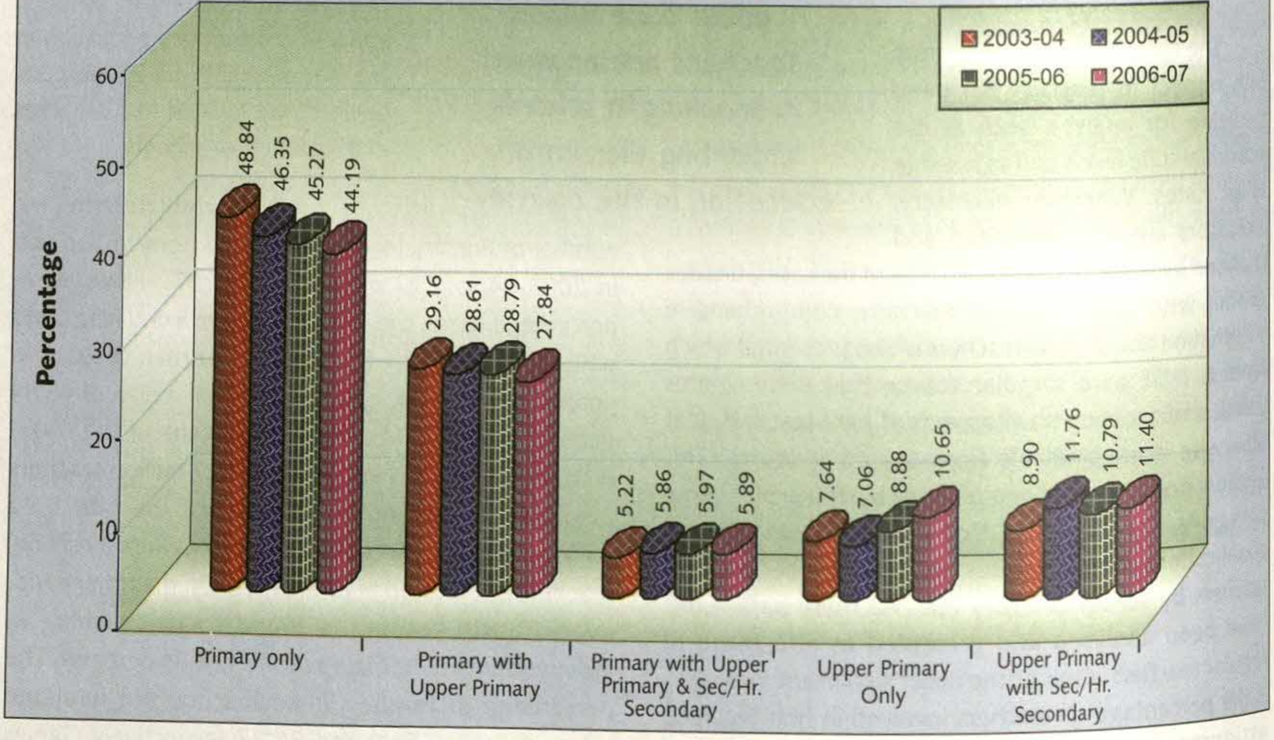
In absolute terms, the number of Primary teachers increased from 1.67 million in 2003-04 to 2.27 million in 2006-07. However, in percentage terms, the same has shown a declining trend which is true both for rural and urban areas. In percentage terms, it has declined from a high of 48.84 percent in 2003-04 to 44.19 percent in 2006-07. Primary schools have more than 2.27 million teachers (against 2.06 million in 2005-06) of the total 5.22 million teachers. More than 85 percent Primary school teachers are located in rural areas. On the other hand, every fourth teacher is found to be teaching in independent Elementary schools (27.84 percent). The percentage of teachers in such schools in rural and urban areas is 26.89 and 31.27 respectively (Tables D1 and D2) which is almost the same as their respective percentages in the previous year. In other types of schools, the percentage varies between 5.89 in integrated Higher Secondary schools to 11.40 in Upper Primary attached to Secondary & Higher Secondary schools. Independent Upper Primary schools reported has 10.65 percent of total teachers.

Table D1
Distribution of Teachers by School Category : 2003-04 to 2006-07

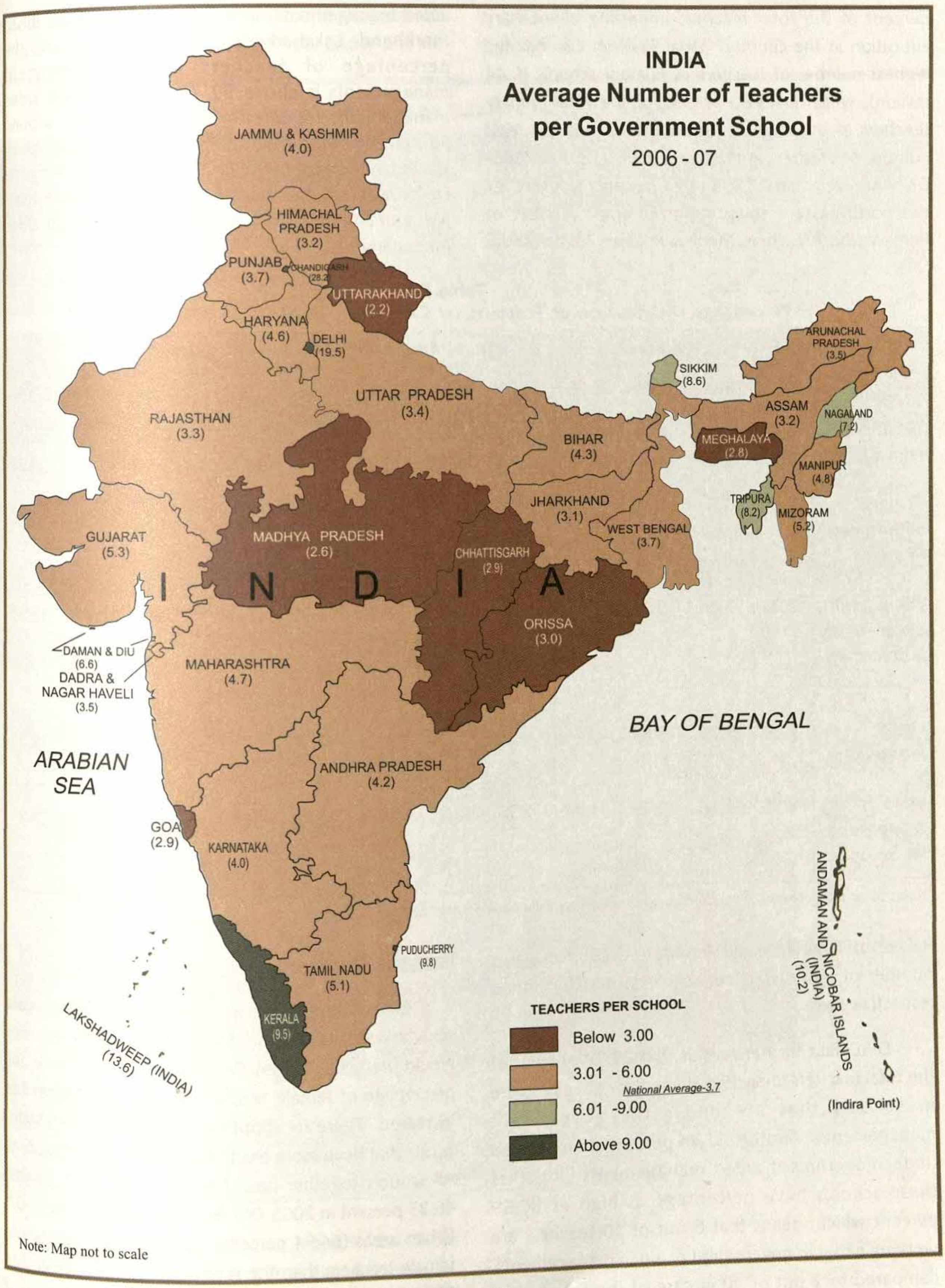
Year	Number of Districts	School Category					Total Teachers
		Primary Only	Primary with Upper Primary	Primary with Upper Primary & Secondary/ Hr. Secondary	Upper Primary Only	Upper Primary & Secondary/ Hr. Secondary	
Number							
2003-04	539	1674591	999855	179107	261856	304999	36,67,637
2004-05	581	1854473	1144835	234576	282517	470702	41,72,287
2005-06	604	2063342	1317058	270229	402161	491491	46,90,176
2006-07	**609**	**2268014**	**1428944**	**302151**	**546590**	**584877**	**52,18, 578**

Note: Teachers in different categories may not add to total teachers because of missing values.

Figure 4.1
Distrbution of Teachers by Category : All States



Obviously, because of the state size, the highest number of teachers is in Uttar Pradesh (0.60 million), that is, 11.66 percent of the total teachers in the country. On the other hand, among states, Himachal Pradesh (1.13 percent) and Uttarakhand (0.95 percent) have the least number of teachers. Delhi reported 93,657 teachers which is 1.79 percent of the total teachers imparting elementary education. The total number of teachers in Delhi is more than the same in a number of other big states. The highest percentage of teachers among the north-eastern states is observed in Tripura which is 0.59



INDIA
Average Number of Teachers per Government School
2006 - 07

Note: Map not to scale

Map 4.1

percent of the total teachers imparting elementary education in the country. Uttar Pradesh also has the highest number of teachers in Primary schools (0.44 million), which is 19.80 percent of the total Primary teachers in the country. Lakshadweep has the least number of teachers in Primary schools (189) in 2006-07, while Delhi has 27,835 (1.24 percent) teachers. All the north-eastern states reported small number of Primary school teachers. Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu and West Bengal reported a large number of Primary school teachers, matching their respective sizes.

Table D2
Percentage Distribution of Teachers by Category : 2003-04 to 2006-07

School Category	All Areas				Rural Areas				Urban Areas			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	48.84	46.35	45.27	44.19	52.45	50.08	49.11	48.38	34.48	32.79	30.80	29.28
Primary with Upper Primary	29.16	28.61	28.79	27.84	27.75	27.88	28.09	26.89	34.89	31.58	31.44	31.27
Primary with Upper Primary & Secondary/ Hr. Secondary	5.22	5.86	5.91	5.89	3.43	3.70	4.11	3.79	12.34	14.00	12.71	13.37
Upper Primary Only	7.64	7.06	8.88	10.65	8.42	7.90	9.02	10.80	4.52	3.99	8.37	10.11
Upper Primary & Secondary/ Hr. Secondary	8.90	11.76	10.79	11.40	7.74	10.25	9.34	10.13	13.50	17.46	16.26	15.91

Note: Totals may not add to hundred because of missing values and rounding of figures.

DISE data further reveals that 69.14 percent of the total teachers imparting elementary education are in schools that are under the government managements. Another 11.25 percent are in schools under government aided managements. Together these schools have percentage as high as 80.39 percent which means that 8 out of 10 teachers are working either in government or aided managements, compared to 2 out of 10 in case of the Private Un-aided managements. In a few states, such as, Bihar, Jharkhand, Lakshadweep, Orissa and Tripura, the percentage of teachers under government managements is above 90. Government and aided managements together in these states have around 95 percent of the total teachers. On the other hand, around 30 percent of the total teachers in Chandigarh, Delhi, Jammu & Kashmir, Madhya Pradesh, Rajasthan, Manipur and Nagaland are under the Private Un-aided managements.

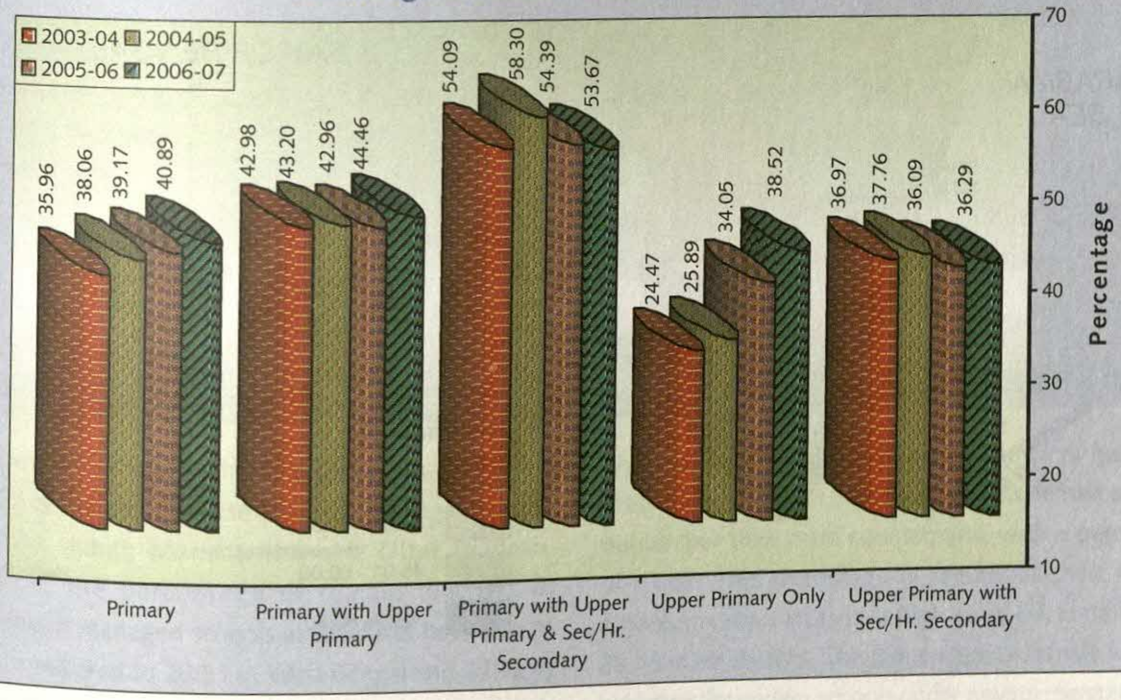
Female Teachers

One of the provisions of the Operation Blackboard scheme was to ensure that one of the teachers appointed would preferably be female. Over a period of time, the percentage of female teachers across school types has increased. There are about 145 districts across 35 States & UTs that have more than 50 percent female teachers. All schools together have had 41.86 percent (against 40.33 percent in 2005-06) female teachers in 2006-07. Urban areas (64.94 percent) had higher percentage of female teachers than the rural areas (35.39 percent) in 2006-07; this is true for all school types. Irrespective of school types, a significant difference is also noticed in case of female teachers in schools under private and government managements. Compared to 49.69 percent female teachers in case of private managements, the corresponding percentage in case of government schools has been low at 37.39 (35.77 in 2005-06) (Tables D3 and D4).

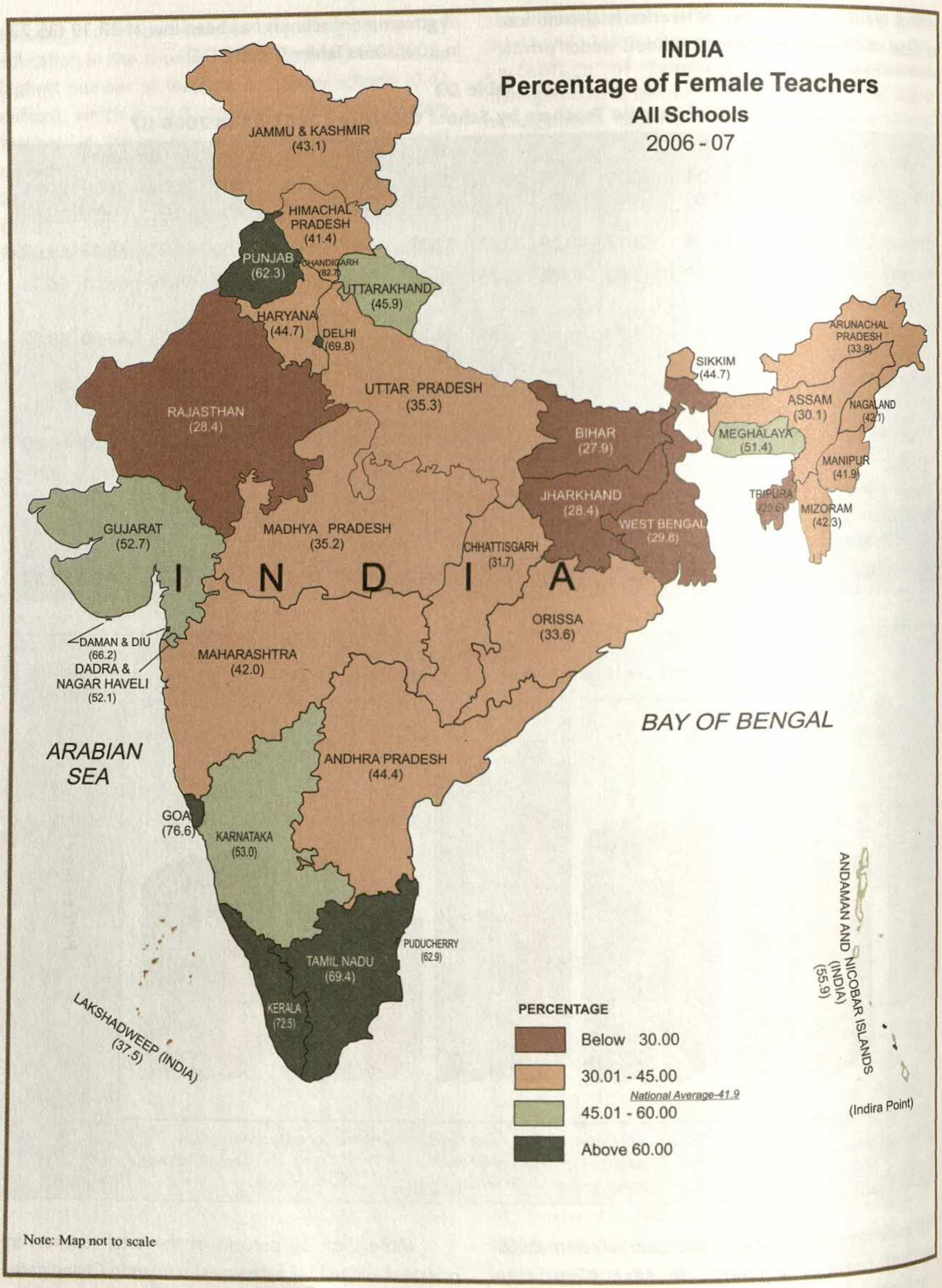
Table D3
Distribution of Female Teachers by School Category : 2003-04 to 2006-07

School Category	All Areas				Rural Areas				Urban Areas			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	35.96	38.06	39.17	40.89	30.92	32.77	34.31	36.10	66.51	68.21	68.17	69.07
Primary with Upper Primary	42.98	43.20	42.96	44.46	35.75	36.35	36.40	37.38	65.97	65.79	65.01	66.18
Primary with Upper Primary & Secondary/ Hr. Secondary	54.09	58.30	54.39	53.67	40.39	44.25	43.25	39.45	69.32	72.21	67.90	68.07
Upper Primary Only	24.47	25.89	34.05	38.52	21.16	22.59	27.28	31.84	48.94	50.14	61.25	64.00
Upper Primary & Secondary/ Hr. Secondary	36.97	37.76	36.09	36.29	28.79	30.42	28.19	28.97	55.74	53.93	53.01	52.91
All Schools	**38.18**	**39.78**	**40.33**	**41.86**	**31.61**	**33.12**	**34.00**	**35.39**	**64.40**	**64.75**	**64.02**	**64.94**

Figure 4.2
Percentage of Female Teachers : All States



More than 80 percent of the total teachers in private managed (all categories) schools in Chandigarh, Daman & Diu, and Goa, are female teachers. The



INDIA
Percentage of Female Teachers
All Schools
2006 - 07

Note: Map not to scale

Map 4.2

> "Percentage of female teachers in government managed schools is higher than the same in case of private managed schools. However, the percentage of female teachers in government managed schools in Bihar has been low at 27.65"

percentage of female teachers under such managements is also high in the states of Andaman & Nicobar Islands (76 percent), D & N Haveli (77 percent), Goa (75 percent), Himachal Pradesh (62 percent), Kerala (73 percent), Punjab (78 percent) and Tamil Nadu (77.30 percent). Chandigarh also has the high percentage of female teachers (77 percent) in case of government schools, compared to 69 percent in Kerala. The corresponding percentage in case of Delhi has been 61. Further, it is noticed that percentage of female teachers in government managed schools (all category schools) is higher than the same in case of private managed schools in Assam, Bihar, Maharashtra and Uttar Pradesh. However, the percentage of female teachers in government managed schools in Bihar has been low at 27.65, compared to 28.31 in West Bengal and 27.42 in Rajasthan, all of which have shown improvement over the previous year. On the other hand, in a few states, the percentage of female teachers in government managed schools has been above 50 of the total strength of teachers. Puducherry (53 percent), Punjab (59 percent) and Tamil Nadu (61 percent) are such states. The percentage of female teachers in private managed schools in Puducherry (74), Punjab (78), and Tamil Nadu (77) is much higher than the same in government managed schools.

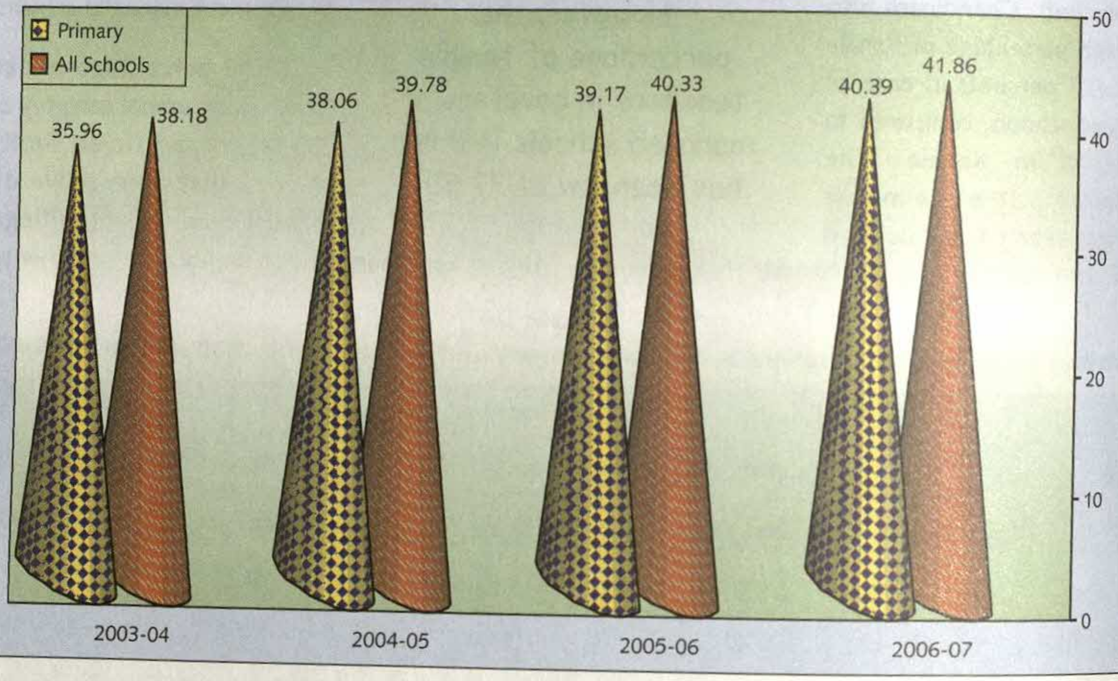
Table D4

Distribution of Female Teachers by School Category and Management : 2003-04 to 2006-07

School Category	Percentage							
	All Government Managements				All Private Managements			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	32.65	34.31	35.58	37.30	56.33	58.65	57.03	57.74
Primary with Upper Primary	39.42	39.42	39.38	40.56	53.31	52.99	51.64	52.65
Primary with Upper Primary & Secondary /Hr. Secondary	42.17	46.39	45.97	44.53	60.96	64.94	59.72	58.84
Upper Primary Only	23.00	24.76	28.73	32.00	29.72	29.83	45.95	49.90
Upper Primary with Secondary & Higher Secondary	34.69	36.70	34.26	34.65	39.75	39.10	37.99	37.94
All Schools	**34.20**	**34.56**	**35.77**	**37.39**	**51.26**	**47.97**	**47.72**	**49.69**

The percentage of female teachers by school category across 35 States and Union Territories reveals that irrespective of the school type, barring integrated Higher Secondary schools, in none of the other school types the percentage of female teachers has been satisfactory. In Higher Secondary schools, female teachers outnumber their male counterparts, with a percentage of 53.67. The percentage of female teachers in such schools in urban areas is as high as 68.07, compared to 39.45 in rural areas. The percentage of female teachers in Higher Secondary schools under private managements has been 58.84, compared to 44.53 in schools managed by government. However, a few states like Arunachal Pradesh (30 percent), Bihar (25 percent), Jharkhand (30 percent), Rajasthan (27 percent), Tripura (30 percent), Uttar Pradesh (39 percent), and West Bengal (34 percent), have had a very low percentage of female teachers in this category. On the other hand, in Delhi (64 percent), Karnataka (58 percent), Puducherry (52 percent) and Kerala (70 percent), majority of teachers in integrated Higher Secondary schools are female. North-Eastern states of Meghalaya (63 percent) and Mizoram (51 percent) also have high percentage of female teachers in such schools. However, it is Chandigarh that has the highest percentage of female teachers (76) in Higher Secondary schools.

Figure 4.3
Percentage of Female Teachers : All States



> “So far as Primary schools are concerned, more than one out of every three teachers is female. However, in the states of Arunachal Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal, female teachers are in minority and their number is much lower than that of their counterpart male teachers”

In Elementary (Primary with Upper Primary) schools, the percentage of female teachers (44.46) has been a bit higher than the same in the Primary schools (40.89 percent). On the other hand, the percentage of female teachers in independent Upper Primary schools has been only 38.52. A few states, such as Delhi (50 percent), Goa (64 percent), Gujarat (55 percent), Karnataka (53 percent), Kerala (69 percent), Puducherry (88 percent) and Tamil Nadu (64 percent), have more female teachers in such schools than male teachers. Punjab too has a high percentage (49 percent) of female teachers in this school category. In Upper Primary attached to Secondary & Higher Secondary schools, the percentage of female teachers has been about 36.29. Gujarat (62 percent), Karnataka (50 percent), Kerala (74 percent), Chandigarh (84 percent) and Andaman & Nicobar Islands (56 percent) have a very high percentage of female teachers in this category of schools. So far as Primary schools are concerned, more than one out of every three teachers is female (40.89 percent). However, in the states of Arunachal Pradesh (34.30 percent), Bihar (28.41 percent), Chhattisgarh (29.72 percent), Jharkhand (26.80 percent), Madhya Pradesh (30.00 percent), Rajasthan (28.93 percent), Uttar Pradesh (38.80 percent) and West Bengal (27.87 percent), female teachers are in minority and their number is much lower than that of their counterpart male teachers. On the other hand, in states like Kerala (75.98 percent) and Tamil Nadu (76.72 percent), majority of Primary school teachers is female. Andaman & Nicobar Islands (54.19 percent), Daman & Diu (67.69 percent), Goa (82.57 percent), Chandigarh (84.60 percent), Delhi (69.45 percent), Punjab (64.37 percent, Puducherry (62.49 percent), Uttarakhand (54.27 percent) and Meghalaya (51.90 percent) have a high percentage of female teachers in their Primary schools.

> "Despite significant improvement in the availability of female teachers in schools that impart elementary education, still 28.26 percent schools that impart elementary education, did not have any female teacher in 2006-07"

Despite significant improvement in the availability of female teachers in schools that impart elementary education, still there may be a few schools without female teachers. Percentage of such schools with no female teacher has been analysed, based on schools having two and more teachers. As many as 28.26 percent schools that impart elementary education, did not have any female teacher in 2006-07, compared to 30.73 percent such schools in the year 2005-06. The percentage of such schools in urban areas has been low at 9.70 against 31.01 in rural areas. About 96 percent of schools without female teachers are located in rural areas. A significant difference is also noticed in case of schools managed by government (29.91 percent) and under private managements (21.49 percent).

So far as independent Upper Primary schools are concerned, in as many as 37.81 percent schools, no female teacher is posted. Further, it has been observed that irrespective of the type of school, a large number of schools in the country do not have female teacher. This is also applicable to Elementary schools (20.90 percent) and integrated Higher Secondary schools (17.69 percent). Again, in the case of Primary schools, it is noticed that in as many as 29.67 percent schools, no female teacher has been posted. The percentage of schools without female teachers is as high as 38.07 in the state of Bihar, 34.73

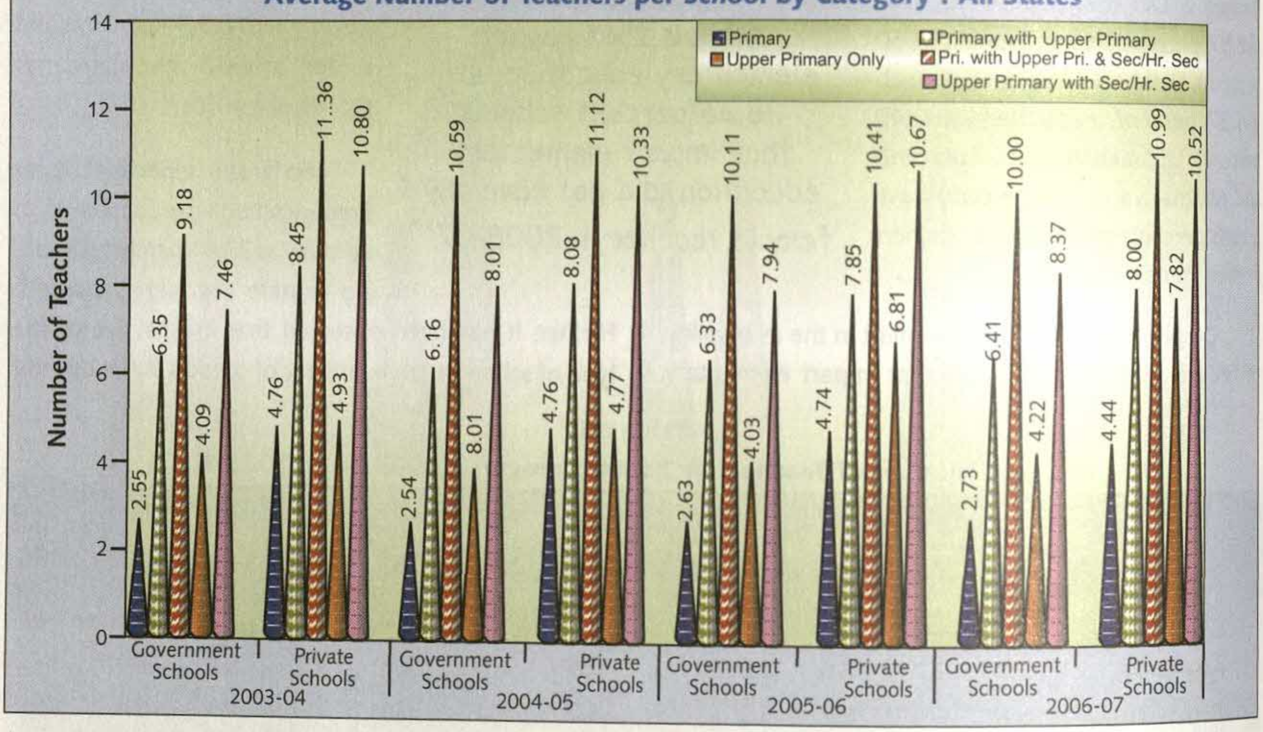
Table D5

Average Number of Teachers by School Category : 2003-04 to 2006-07

School Category	All Areas				Rural Areas				Urban Areas			
	2003 -04	2004 -05	2005 -06	2006 -07	2003 -04	2004 -05	2005 -06	2006 -07	2003 -04	2004 -05	2005 -06	2006 -07
Primary Only	2.7	2.7	2.8	2.9	2.6	2.6	2.7	2.8	4.5	4.6	4.6	4.7
Primary with Upper Primary	6.8	6.6	6.7	6.9	6.3	6.2	6.3	6.4	9.0	8.6	8.4	8.6
Primary with Upper Primary & Secondary/ Hr. Secondary	10.5	10.9	10.3	10.7	9.2	9.2	8.9	8.8	12.3	13.4	12.5	13.7
Upper Primary Only	4.3	4.0	4.6	5.1	4.1	3.8	4.1	4.5	5.6	5.5	9.1	10.1
Upper Primary & Secondary/ Hr. Secondary	8.8	9.0	9.1	9.4	7.9	8.0	8.0	8.4	11.6	12.1	12.4	12.6
All Schools	**3.9**	**4.0**	**4.2**	**4.4**	**3.6**	**3.6**	**3.8**	**3.9**	**7.0**	**7.3**	**7.4**	**7.7**

in Madhya Pradesh, 38.59 in Chhattisgarh, 36.75 in Jammu & Kashmir, 42.34 in Jharkhand, 61.96 in Tripura and 41.35 in West Bengal. Rajasthan (28.75 percent) and Uttar Pradesh (21.28 percent) too have a large number of Primary schools without female teachers. Except Delhi, Kerala, Puducherry, Lakshadweep, Punjab, Sikkim and Tamil Nadu, in most of the other states, the number of Primary schools without female teachers is above 20 percent. The percentage of such schools is only 0.80 in Kerala and 9.40 in Tamil Nadu. Chandigarh did not have any Primary school without female teacher in 2006-07, which is also true for other school types.

Figure 4.4
Average Number of Teachers per School by Category : All States



> "On an average, there are 4.36 teachers in a school that imparts elementary education. A significant difference is noticed in the availability of teachers in rural and urban areas"

Total number of teachers presented above is not expected to provide information about the availability of teachers in an individual school type. For this purpose, average number of teachers by school category is analysed (Table D3).

Average Number of Teachers

The average number of teachers in a school imparting elementary education has shown improvement during the period 2003-04 to 2006-07. Such schools/ sections have had more teachers in 2006-07 than in the previous year which is also true for all school types. By and large, this is also true for rural and urban areas, barring integrated Higher Secondary schools which had slightly a less number of teachers in 2006-07 than in the previous year. The all-India average of all states reveals that in 2006-07, on an average, there were 4.36 teachers (4.19 teachers in 2005-06) in a school that imparts elementary education. A significant difference is noticed in the availability of teachers in rural (3.89) and urban areas (7.67). Schools in rural areas have fewer teachers than schools in urban areas and the difference is significant. A wide difference is also seen between schools managed by government

(3.73) and private management schools (7.12). Average number of teachers in government schools is about half of the average in private managed schools. The average number of teachers by school category reveals that the highest number of teachers per school is observed in case of integrated Higher Secondary schools (10.7), followed by Upper Primary attached to Secondary and Higher Secondary schools (9.4), independent Elementary (6.7), and Upper Primary (5) schools. However, despite improvement, the lowest percentage is noticed in case of Primary schools (2.9 teachers) which is almost as much as in the previous year.

> "It is interesting to note that barring Orissa and Uttarakhand, all other states reported an average of 3 and more teachers in schools that impart elementary education across the county, but the same is not true for all school types"

Table D6

Average Number of Teachers by School Category and Management : 2003-04 to 2006-07

School Category	Average							
	All Government Managements				All Private Managements			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	2.6	2.5	2.6	2.7	4.8	4.8	4.7	4.4
Primary with Upper Primary	6.4	6.2	6.3	6.4	8.5	8.1	7.9	8.0
Primary with Upper Primary & Secondary/ Hr. Secondary	9.2	10.6	10.1	10.3	11.4	11.1	10.4	11.0
Upper Primary Only	4.1	3.8	4.0	4.2	4.9	4.8	6.8	7.8
Upper Primary with Secondary & Higher Secondary	7.5	8.0	7.9	8.4	10.8	10.3	10.7	10.6
All Schools	**3.4**	**3.5**	**3.6**	**3.7**	**7.2**	**7.1**	**7.1**	**7.1**

It is interesting to note that barring Orissa (2.94 teachers per school) and Uttarakhand (2.57 teachers per school), all other states reported an average of 3 and more teachers in schools that impart elementary education across the county, but the same is not true for all school types. On the other hand, none of the major states reported fewer than two teachers which is true for all school types, including Primary schools. Amongst various states, Delhi has the highest average number of teachers (19.8) and Madhya Pradesh and Chhattisgarh, the lowest average (3.2). Kerala with 10 teachers and Chandigarh with 30 teachers too have a very high average number of teachers, compared to 4.3 teachers in Bihar (3.9 in previous year). All the states in the north-eastern region have adequate number of teachers in its schools. States, such as Maharashtra (6.4), Mizoram (8.3) and Sikkim (8.0), have on an average more than 5 teachers. Tamil Nadu reported an average of 6.9 teachers and West Bengal, 3.9 teachers in schools that impart Elementary education.

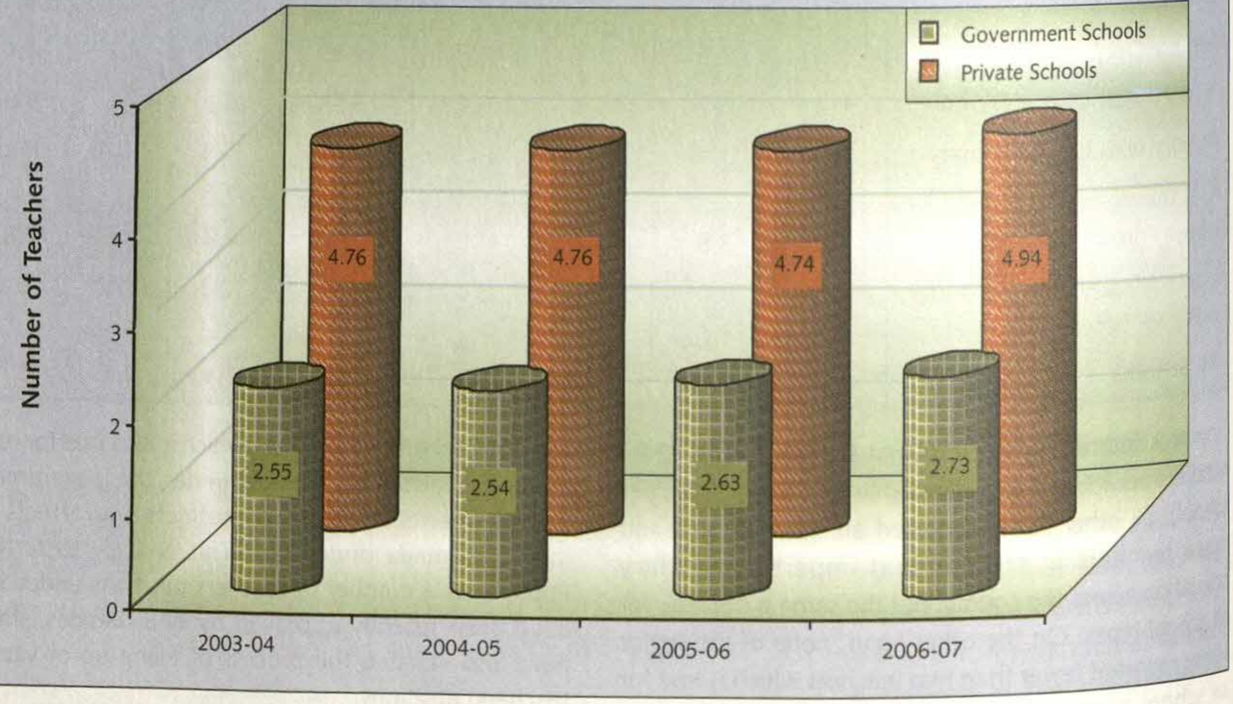
Like teachers in other school types, average number of teachers in Primary schools also has shown an increasing trend during the period from 2003-04 to 2006-07. On an average, Primary schools in India have now more than two teachers which is also true for rural areas and also such schools under the government managements. This clearly reflects the effects of initiatives made under SSA. This is likely to further improve as a number of teachers positions under SSA have been recently approved by PAB. Besides, states have also initiated the process of filling up of vacant teachers' positions.

Primary schools have had an average of 2.93 teachers per school in 2006-07 against 2.84 teachers per school in 2005-06 and 2.74 teachers in 2004-05. Schools located in rural areas had an average of 2.75

teachers, compared to 4.65 teachers in schools located in urban areas. The disparity noticed in rural and urban areas and also in government and private managed schools is also true for all other school types. Except Dadra & Nagar Haveli (1.71), all other states have an average of more than 2 teachers per school in Primary classes. In Kerala, the average per school is as high as 6.4 teachers at this level; in Chandigarh it is 14.5, and in Delhi 11.6. Lakshadweep also reported a high average of 12.3 teachers in its Primary schools which is also true for all other school types, as also for rural and urban areas. In Jharkhand, the average number of Primary teachers per school is 2.2, compared to 2.03 in Arunachal Pradesh. All Primary schools in Bihar have had an average of 3.4 teachers (2.97 in previous year), compared to 2.1 teachers in Rajasthan. The average is as high as 6.0 in Nagaland, 5.8 in Puducherry and Sikkim and 3.9 in Tripura. West Bengal also reported an average of more than 3 teachers in its Primary schools.

> "On an average, Primary schools in India have now more than two teachers which is also true for rural areas and also such schools under the government managements. This clearly reflects the effects of initiatives made under SSA"

Figure 4.5
Average Number of Teachers in Primary Schools : All States



The analysis further reveals that, irrespective of the school type and state, private managed/schools have generally better average number of teachers per school than government managed schools. Compared to 2.73 teachers in government managed Primary schools, the corresponding number in private managed schools is as high as 4.44 teachers. In about 19 States & UTs, the average number of teachers in government-managed Primary schools has been lower than the national average of 2.93 teachers. In the states of Chhattisgarh (2.5 teachers), Dadra & Nagar Haveli (1.6 teachers), Goa (2.1 teachers), Himachal Pradesh (2.5 teachers), Jammu & Kashmir (2.3 teachers), Jharkhand (2.1 teachers), Karnataka (2.1 teachers), Madhya Pradesh (2.3 teachers), Rajasthan (2.00 teachers), Uttarakhand (1.9 teachers) etc, the average number of teachers is lower than 2.93 in government managed Primary schools. Except Arunachal Pradesh and Meghalaya, all other states in the north-eastern region have higher number of teachers in their Primary schools than the national average. The private managed Primary schools in these states and all other states have had more than two teachers. Rajasthan has significantly high average number of teachers, i.e. 4.0 teachers in every private managed Primary school. The average number of teachers in Primary schools in Tripura has been high at 7.8 which is the fourth highest among all the states that reported DISE data in 2006-07. Kerala too has an average of 6.8 teachers in the private managed Primary schools, compared to 7.8 in Delhi and 25.2 in Chandigarh. Maharashtra also reported an average of almost 7 teachers in its Primary schools. Arunachal Pradesh which reported a low overall average of 2.0 teachers has had an average of 7.5 teachers in case of private managed Primary schools when only 1.9 percent of schools under government management reported such an average.

"In Bihar, it is not only PTR that is high but it has also reported a high student-classroom ratio of 91. With the appointment of a large number of teachers in the state, pupil-teacher ratio is expected to improve in the year that follows"

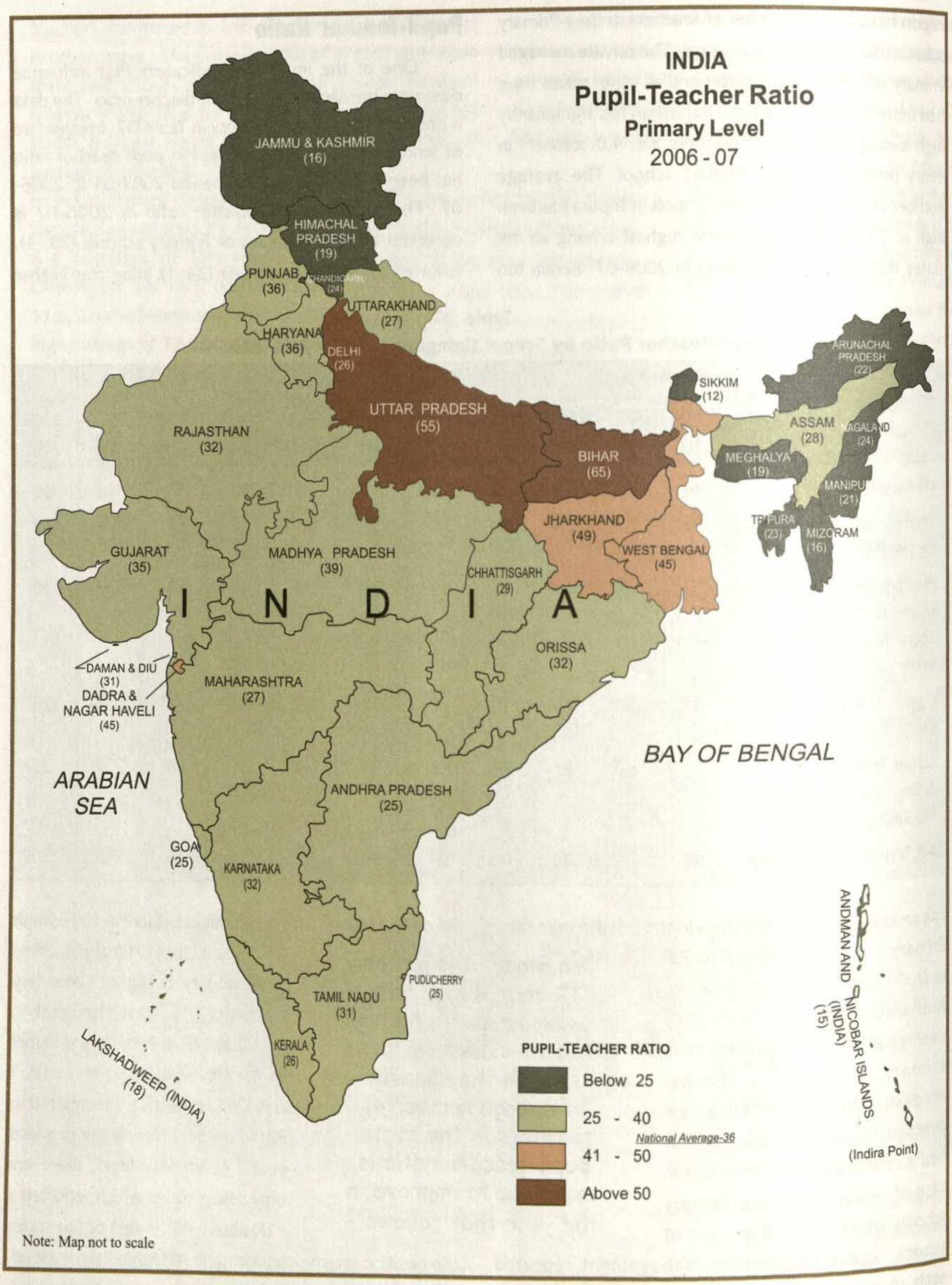
Pupil-Teacher Ratio

One of the important indicators that influence classroom transaction is the pupil-teacher ratio. The data is presented by school category in Table D7. Irrespective of school types, an improvement in pupil-teacher ratio has been noticed during the period 2003-04 to 2006-07. The highest pupil-teacher ratio in 2006-07 is observed to be in the case of Primary schools (39: 1), followed by Elementary schools (34: 1), integrated Higher Secondary schools and independent Upper Primary schools (29:1), and Upper Primary attached to Secondary & Higher Secondary schools (27:1). It is important to note that PTR at Primary and Upper Primary levels of education is 36:1 and 32:1 respectively, compared to 38:1 and 34:1 during the previous year. At Primary level, there are only seven states which reported a PTR above 40; in rest of the states the position is quite comfortable. At Upper Primary level, PTR varies from 15 students per teacher in Andaman &

Table D7

Pupil-Teacher Ratio by School Category : 2003-04 to 2006-07

School Category	All Areas				Rural Areas				Urban Areas			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	44	42	40	39	44	44	41	39	40	37	36	36
Primary with Upper Primary	38	36	35	34	38	37	35	35	36	35	34	33
Primary with Upper Primary & Secondary/ Hr. Secondary	32	31	30	29	31	31	30	30	33	32	30	29
Upper Primary Only	30	31	30	29	30	32	31	30	28	29	26	26
Upper Primary & Secondary/ Hr. Secondary	34	31	30	27	35	33	31	28	31	28	27	25
All Schools	**39**	**38**	**36**	**34**	**40**	**39**	**37**	**35**	**36**	**33**	**32**	**31**


INDIA
Pupil-Teacher Ratio
Primary Level
2006 - 07
JAMMU & KASHMIR (16)
HIMACHAL PRADESH (19)
PUNJAB (36)
CHANDIGARH (24)
UTTARAKHAND (27)
HARYANA (36)
DELHI (26)
UTTAR PRADESH (55)
RAJASTHAN (32)
BIHAR (65)
SIKKIM (12)
ARUNACHAL PRADESH (22)
ASSAM (28)
NAGALAND (24)
MEGHALYA (19)
MANIPUR (21)
TRIPURA (23)
MIZORAM (16)
JHARKHAND (49)
WEST BENGAL (45)
GUJARAT (35)
MADHYA PRADESH (39)
CHHATTISGARH (29)
I N D I A
ORISSA (32)
DAMAN & DIU (31)
DADRA & NAGAR HAVELI (45)
MAHARASHTRA (27)
BAY OF BENGAL
ARABIAN SEA
ANDHRA PRADESH (25)
GOA (25)
KARNATAKA (32)
ANDMAN AND NICOBAR ISLANDS (INDIA) (15)
PUDUCHERRY (25)
TAMIL NADU (31)
KERALA (26)
LAKSHADWEEP (INDIA) (18)
(Indira Point)
PUPIL-TEACHER RATIO
Below 25
25 - 40
National Average-36
41 - 50
Above 50
Note: Map not to scale

Map 4.3

Nicobar Islands to 67 students per teacher in Bihar. Bihar too has a high (65:1) PTR at Primary level of education. The state has a high pupil-teacher ratio of 69 even in case of schools managed by private managements - Aided, 71:1; and Un-aided, 67:1. The corresponding ratio for Uttar Pradesh has also been high at 55:1. In Bihar, it is not only PTR that is high but it has also reported a high student-classroom ratio of 91. With the appointment of a large number of teachers in the state, pupil-teacher ratio is expected to improve in the year that follows. On the other hand, all category schools together had a pupil-teacher ratio of 34 in 2006-07, compared to 36 in 2005-06. The corresponding figures in rural and urban areas are 35 and 31 respectively which also show improvement over the previous year. Government managed schools have a slightly higher

Figure 4.6
Pupil-Teacher Ratio

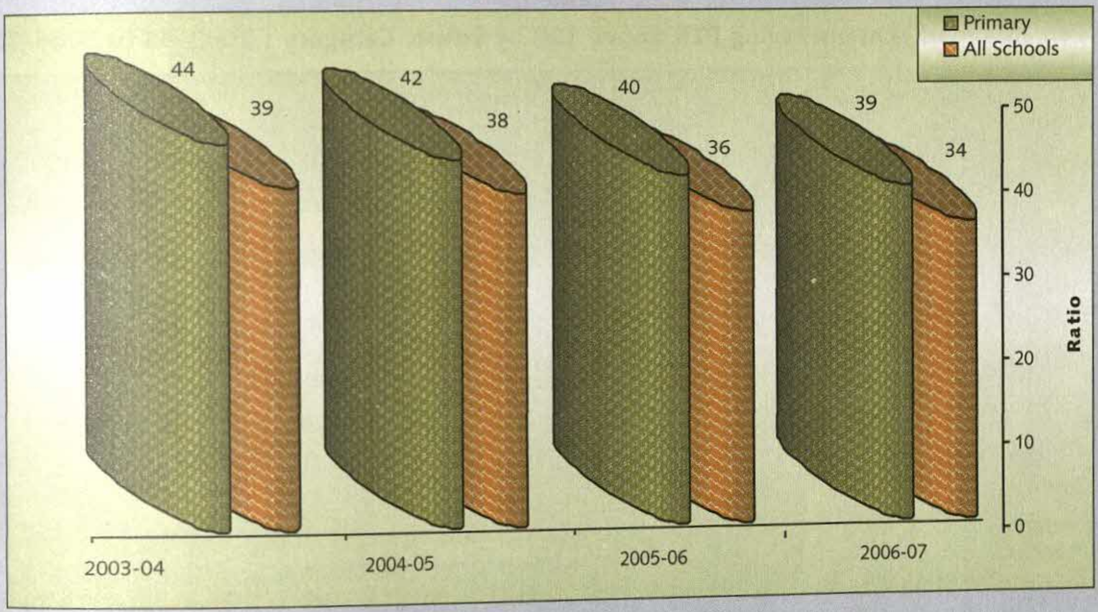


Table D8
Pupil-Teacher Ratio by School Category and by Management : 2003-04 to 2006-07

School Category	All Government Managements				All Private Managements			
	2003 -04	2004 -05	2005 -06	2006 -07	2003 -04	2004 -05	2005 -06	2006 -07
Primary Only	45	44	41	**39**	37	35	34	**35**
Primary with Upper Primary	39	39	36	36	33	31	31	31
Primary with Upper Primary & Secondary/ Hr. Secondary	33	29	30	28	31	31	30	30
Upper Primary Only	29	30	30	29	34	35	32	29
Upper Primary with Secondary & Hr. Secondary	35	30	27	24	32	28	32	29
All Schools	**41**	**40**	**37**	**36**	**34**	**31**	**32**	**31**

pupil-teacher ratio (36) than the same in the private managed schools (31). States like Arunachal Pradesh (22: 1), Himachal Pradesh (18: 1), Jammu & Kashmir (16: 1), Karnataka (32: 1) and Kerala and Tamil Nadu (27:1), have an ideal pupil-teacher ratio. Delhi reported a pupil-teacher ratio of 25: 1 and Puducherry, 24:1. All the states from the north-eastern region also have a comfortable pupil-teacher ratio of 25: 1. Despite improvement in pupil-teacher ratio across school types, there are still a few schools that have reported a PTR above 100. About 4.91 percent schools located in rural areas have PTR above 100, compared to 5.17 percent in urban areas. In as many as 5.21 percent Primary schools, the pupil-teacher ratio is above 100 (rural 5.20 and urban 5.38 percent). The percentage in government schools (5.07 percent) having PTR 100 and is lower than in private managed schools (6.24 percent). On the other hand, 4.95 percent Upper Primary schools, 4.49 percent Elementary schools, 5.27 percent integrated Higher Secondary schools and 3.11 percent Upper Primary attached to Higher Secondary schools also have had pupil-teacher ratio above 100 (Tables D9 and D10). It is also observed that 12.81 percent Primary schools in Uttar Pradesh have a PTR of 100 and above compared to only 0.02 percent schools in Kerala. Bihar (16.35 percent) and Jharkhand (6.67 percent) too have a large number of such schools. Himachal Pradesh and all the states from the north-eastern region have negligible number of such schools. A few states such as Andaman & Nicobar Islands, Daman & Diu, Lakshadweep, Puducherry and Sikkim reported no such schools.

Table D9

Percentage of Schools having PTR above 100 by School Category : 2003-04 to 2006-07

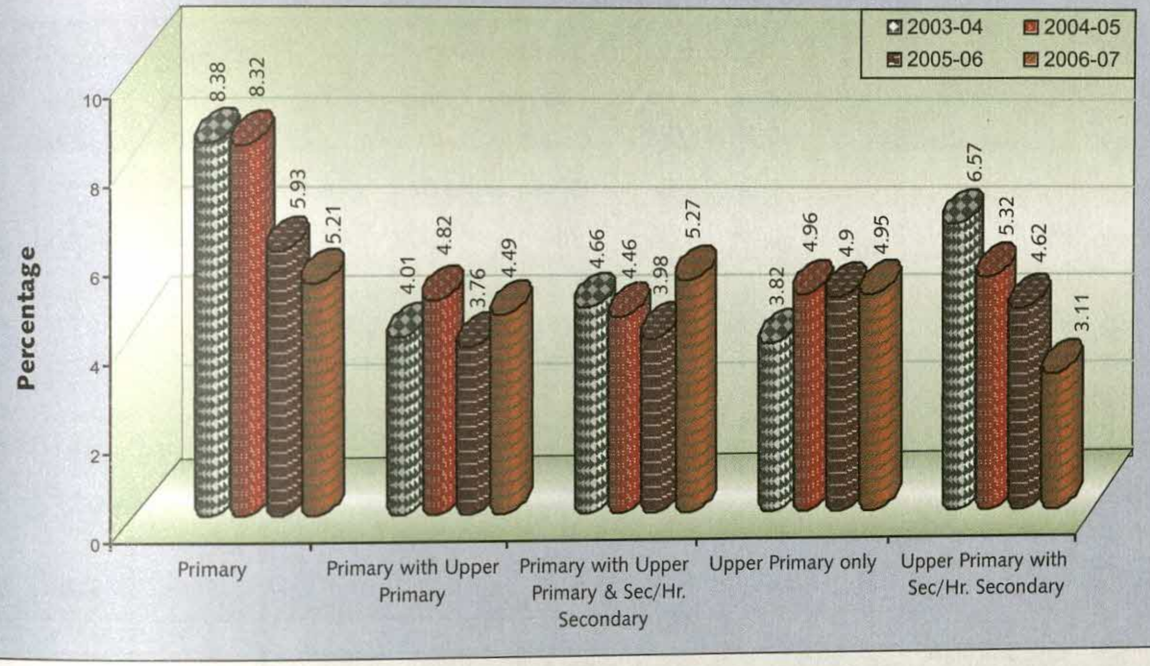
School Category	All Areas				Rural Areas				Urban Areas			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	8.38	8.32	5.93	5.21	8.68	8.66	6.05	5.20	5.22	4.94	4.68	5.38
Primary with Upper Primary	4.01	4.82	3.76	4.49	4.05	5.08	3.69	4.15	3.97	3.73	4.09	5.89
Primary with Upper Primary & Secondary/ Hr. Secondary	4.66	4.46	3.98	5.27	3.83	4.39	4.02	4.65	5.89	4.58	3.94	6.23
Upper Primary Only	3.82	4.96	4.90	4.95	3.96	5.08	5.10	5.07	2.43	3.80	3.08	3.89
Upper Primary & Secondary/ Hr. Secondary	6.57	5.32	4.62	3.11	7.35	6.05	5.15	3.26	4.25	3.19	3.03	2.64
All Schools	**7.08**	**7.14**	**5.30**	**4.94**	**7.49**	**7.61**	**5.49**	**4.91**	**4.65**	**4.33**	**4.16**	**5.17**

Note: Totals may not add to hundred because of missing values and rounding of figures.

Age-Profile of Teachers

The distribution of teachers by age groups (below 18, 18-25, 26-35, 36-45, 46-55 and above 55 years) and school category has been presented in Table D11. Average age of teachers across states suggests that majority of teachers in Primary schools are between the age group of 26-45 years which is also true for other types of schools. A few teachers across school types are found to be below 18 years of age and that is true both for male and female teachers. Further, it has been noticed that the percentage of teachers in the age group 18-25 years across school types has been very low. However, their percentage in the current year has improved over the previous year. In 2006-07, the percentage of male and female teachers (all categories) of age between 18 to 25 years was 12.94 and 19.67 respectively. The improvement in the percentage of young teachers (18-25 years) is because of their recruitment initiated recently in a few states. A number of regular posts of teachers have been lying vacant across states while fresh recruitments have been initiated only in a few states. A few others have instead appointed *para*-teachers against regular positions which is evident in the statistics presented in the following section.

Figure 4.7
Percentage of Schools with PTR above 100 : All States



It is observed that percentage of male teachers in the age group above 55 years has been 5.97 and that of female teachers 3.10. All these teachers are expected to retire in the next 2-3 years. In the case of government schools, the respective percentages are 11.75 for male teachers and 6.98 for female teachers (Table D11). Aided schools too have this percentage high at 9.17 and 7.30 percent respectively, compared to 3.57 and 3.12 in the un-aided schools. In view of they being in large number (5.52 million), the number of teachers retiring soon is very high and majority of them is from the rural areas. The states should, therefore, undertake a thorough analysis of data on teachers and initiate steps for timely recruitment.

"Number of teachers retiring soon is very high and majority of them is from the rural areas. The states should, therefore, undertake a thorough analysis of data on teachers and initiate steps for timely recruitment"

Academic and Professional Qualification of Regular Teachers

Educational as well as professional qualifications of teachers across school types have been presented in Tables D12 to D14. Irrespective of the type of schools, qualifications of a good number of teachers (2.92 percent) are below Secondary level. This is also applicable even to integrated Higher Secondary schools and Upper Primary attached to Secondary & Higher Secondary schools. The distribution of all category teachers by educational qualifications reveals that 44.27 percent of male teacher and 45.32 percent of female teachers are Higher Secondary and below; these figures are quite similar to those in the previous year. Altogether 44.71 percent (all categories) teachers who impart elementary education in the country are Higher Secondary and below. It may be recalled that in many states the minimum qualification that has been prescribed for a teacher is Secondary. However, a few of them are even below Secondary level (2.92 percent). The percentage of teachers up to Higher Secondary level is higher in rural areas (total 47.71 percent; male 46.28 percent; and female 50.39 percent)

Table D10
Percentage of Schools having PTR Above 100 by School Category and Management : 2003-04 to 2006-07

School Category	All Government Managements				All Private Managements			
	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
Primary Only	8.53	8.51	5.94	5.07	6.67	6.37	5.80	6.24
Primary with Upper Primary	3.88	5.06	3.59	3.95	4.51	4.03	4.27	5.91
Primary with Upper Primary & Secondary/ Hr. Secondary	4.35	4.05	3.51	4.29	4.88	4.69	4.29	5.84
Upper Primary Only	3.34	4.20	4.48	4.62	5.88	8.28	6.53	6.03
Upper Primary with Secondary & Hr. Secondary	6.37	4.54	3.42	2.67	6.85	6.44	6.13	3.61
All Schools	**7.26**	**7.39**	**5.33**	**4.76**	**5.89**	**5.73**	**5.28**	**5.70**

Figure 4.8

Percentage of Primary Schools with PTR above 100 : 2006-07

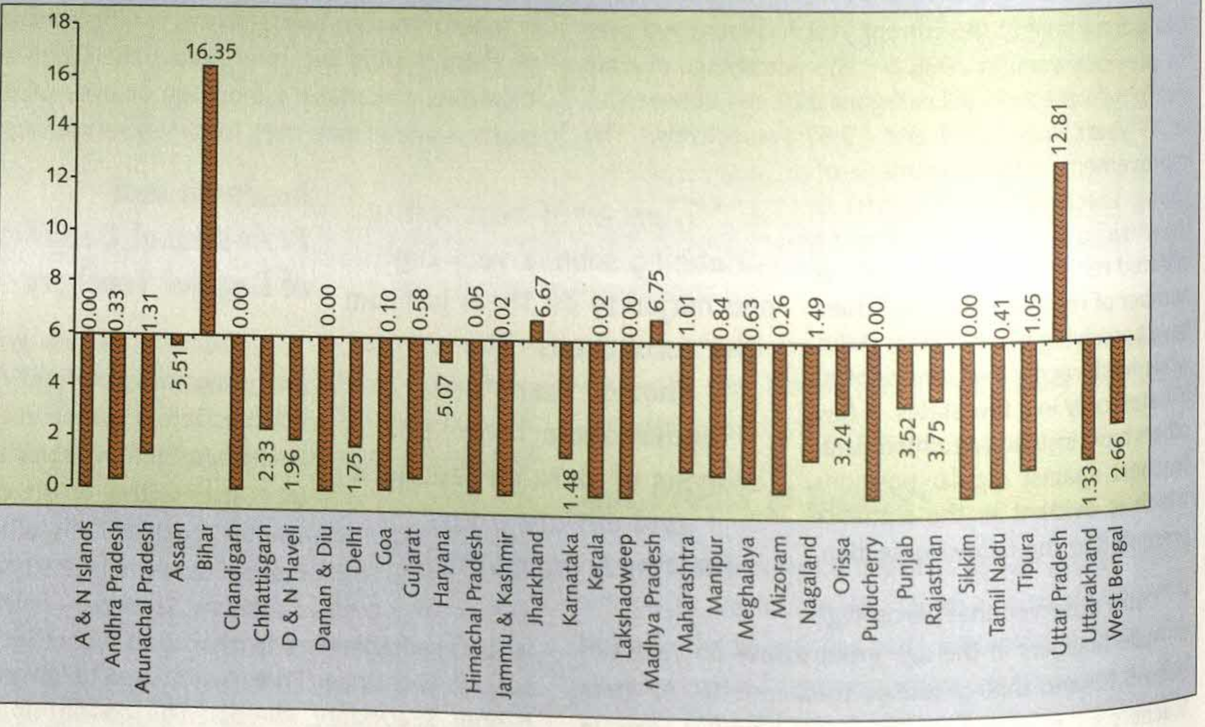


Table D11

Percentage of Teachers Aged 55 Year and Above : Government Managements Only

Sl. No.	State/UT	Male	Female	Total
1	Andaman & Nicobar Islands	10.75	3.11	6.70
2	Andhra Pradesh	4.32	2.95	3.78
3	Arunachal Pradesh	4.35	1.78	3.52
4	Assam	8.90	6.31	8.08
5	Bihar	16.22	8.43	14.04
6	Chandigarh	5.95	9.15	8.40
7	Chhattisgarh	12.12	5.23	10.20
8	Dadra & Nagar Haveli	5.78	7.91	6.77
9	Daman & Diu	20.34	14.50	16.86
10	Delhi	11.76	11.89	11.84
11	Goa	19.67	10.79	12.86
12	Gujarat	5.14	5.18	5.16
13	Haryana	10.99	9.77	10.47
14	Himachal Pradesh	6.46	7.83	6.95
15	Jammu & Kashmir	4.38	5.16	4.67
16	Jharkhand	11.84	8.36	10.90
17	Karnataka	5.15	4.10	4.66
18	Kerala	1.56	1.60	1.59
19	Lakshadweep	6.41	2.14	4.81
20	Madhya Pradesh	10.24	7.11	9.37
21	Maharashtra	6.99	5.87	6.55
22	Manipur	9.93	5.19	7.92
23	Meghalaya	6.41	4.66	5.64
24	Mizoram	25.57	32.76	28.38
25	Nagaland	3.12	1.73	2.60
26	Orissa	14.56	4.54	11.25
27	Puducherry	18.68	10.32	14.27
28	Punjab	12.43	12.51	12.48
29	Rajasthan	5.61	4.45	5.29
30	Sikkim	3.65	1.64	2.84
31	Tamil Nadu	14.24	6.87	9.73
32	Tripura	8.31	9.41	8.58
33	Uttar Pradesh	24.85	9.05	18.91
34	Uttarakhand	13.77	9.20	11.78
35	West Bengal	21.04	17.58	20.06
	All States	**11.75**	**6.98**	**9.96**

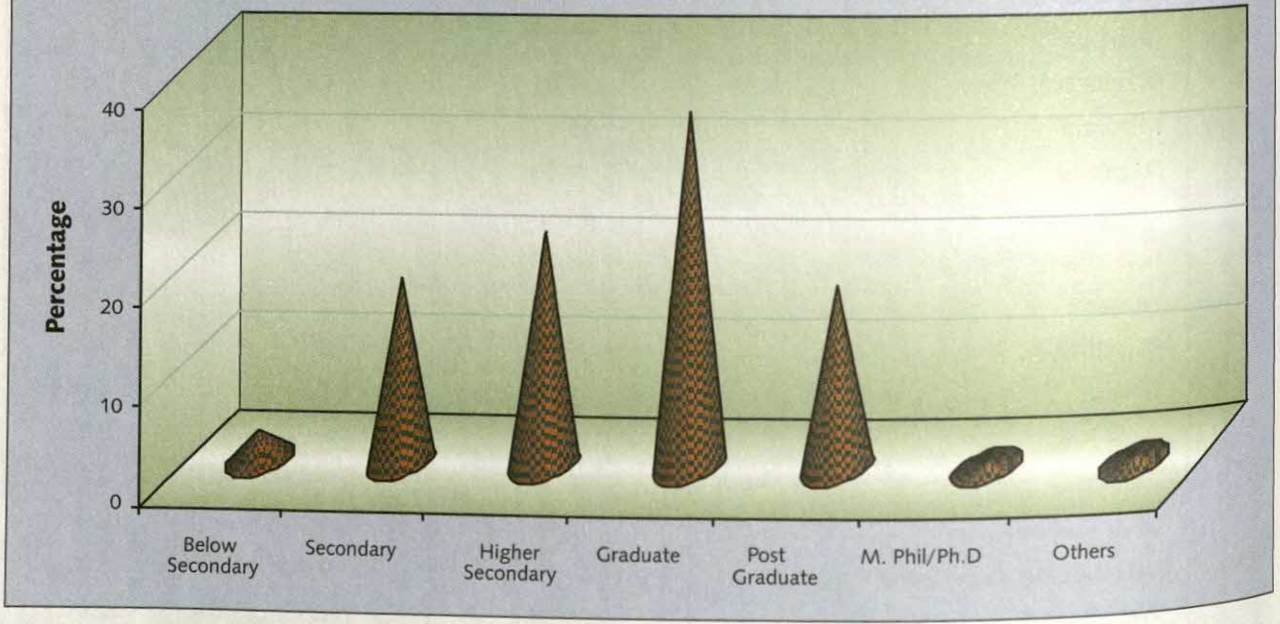
than the same in urban areas (total 34.99 percent; male 32.10 percent; and female 36.55 percent). On the other hand, about 54 percent male and 53 percent female teachers are Graduates and Post-Graduates (total 53.97 percent). Urban areas (63.16 percent) have more Graduates and Post-Graduates teachers than the same in rural areas (51.14 percent). Only 48.38 percent female teachers are Graduates and above in rural areas, compared

Table D12
Academic Qualification of All Category (Regular) Teachers : 2006-07

Qualification	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below Secondary	2.86	3.01	2.92	2.92	3.29	3.05	2.47	2.52	2.50
Secondary	17.66	19.53	18.44	18.44	21.17	19.39	12.94	16.69	15.38
Higher Secondary	23.75	22.78	23.35	24.92	25.93	25.27	16.69	17.34	17.11
Up to Higher Secondary Level	**44.27**	**45.32**	**44.71**	**46.28**	**50.39**	**47.71**	**32.10**	**36.55**	**34.99**
Graduate	36.23	34.74	35.61	35.25	31.76	34.04	42.23	39.89	40.71
Post Graduate	18.26	18.51	18.36	17.36	16.62	17.10	23.68	21.79	22.45
Graduate & Post Graduates	**54.49**	**53.25**	**53.97**	**52.61**	**48.38**	**51.14**	**65.91**	**61.68**	**63.16**
M.Phil/ Ph.D	0.42	0.54	0.47	0.36	0.45	0.39	0.75	0.69	0.71
Others	0.46	0.63	0.53	0.41	0.52	0.45	0.75	0.82	0.80
No Response	0.36	0.26	0.32	0.33	0.25	0.30	0.48	0.26	0.34

Note: Totals may not add to hundred because of rounding of figures.

Figure 4.9
Percentage of Teachers by Academic Qualification : All Category (Regular) Teachers : All States, 2006-07



to 61.68 percent in urban areas. Irrespective of the school type, a few teachers have even M.Phil and Ph.D degrees (total 0.47 percent; male 0.42 percent; and female 0.47 percent).

> "Only 29.26 percent of the total Primary school male teachers are Graduates against 30.50 percent such female teachers. Another 13 percent male and 14 percent female teachers are Post-Graduates"

The distribution of Primary school teachers in position by qualifications (Table D13) reveals that majority of the teachers are Higher Secondary and below (total 55.77 percent, male 56.82 percent, and female 54.23 percent). About 3.99 percent male and 4.33 percent female teachers are below Secondary and another 30.41 percent male and 27.77 percent female teachers have completed Secondary level of education. Not much difference is noticed in percentage of teachers below Secondary in rural areas and urban areas but the same is not true in case of teachers having Graduate and Post-Graduate degrees. Further, it is observed that percentage of female teachers having Graduate and Post-Graduate degrees is a bit higher than their male counterparts, which is true for both rural and urban areas. Only 29.26 percent of the total Primary school male teachers are Graduates against 30.50 percent such female teachers. Another 13 percent male and 14 percent female teachers are Post-Graduates. A few of them have even M.Phil or Ph.D degrees. About 53 percent Primary school teachers in urban areas have Graduate and Post-Graduate degrees against about 42 percent in rural areas. It has also been observed that compared to teachers in Primary schools, teachers in other school types are better qualified. Only 2.18 percent male and 2.35 percent female teachers in Elementary schools are below Secondary level (all teachers, 2.22 percent). About 53 percent male and 45 percent female teachers in such schools are Graduates and Post-Graduates, compared to 48 percent all teachers. In addition, about 0.26 percent of total teachers in such schools possess M.Phil or Ph.D degrees. Majority of teachers in integrated Higher Secondary schools are

Table D13

Academic Qualification of Primary School (Regular) Teachers : 2006-07

Qualification	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below Secondary	3.99	4.33	4.13	4.01	4.58	4.21	3.77	3.70	3.72
Secondary	22.42	22.13	22.30	22.89	23.13	22.97	17.35	19.56	18.88
Higher Secondary	30.41	27.77	29.34	30.86	29.72	30.46	25.55	22.78	23.63
Up to Higher Secondary	**56.82**	**54.23**	**55.77**	**57.76**	**57.43**	**57.64**	**46.67**	**46.04**	**46.23**
Graduate	29.26	30.50	29.76	28.62	27.97	28.40	36.05	36.97	36.69
Post Graduate	13.14	14.33	13.62	12.85	13.72	13.15	16.17	15.87	15.96
Graduate & Post Graduates	**42.40**	**44.83**	**43.38**	**41.47**	**41.69**	**41.55**	**52.22**	**52.84**	**52.65**
M.Phil/ Ph.D	0.23	0.29	0.25	0.22	0.28	0.24	0.31	0.33	0.32
Others	0.28	0.42	0.33	0.26	0.36	0.29	0.46	0.58	0.54
No Response	0.29	0.23	0.27	0.29	0.24	0.27	0.34	0.21	0.25

Note : Totals may not add to hundred because of rounding of figures.

either Graduates (male 47.20 percent; and female 44.74 percent) or Post-Graduates (male 25.57 percent, and females 29.84 percent). Majority of teachers in independent Upper Primary schools are either Graduates or Post-Graduates. Similar pattern is observed in the case of Upper Primary integrated with Higher Secondary schools too.

Table D14
Professional Qualification of All Category Teachers (Regular) : 2006-07

Professional Qualification	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
J.B.T or Equivalent	23.11	19.09	21.04	24.66	21.94	23.42	13.70	14.16	13.50
S.B.T or Equivalent	21.84	28.95	24.36	21.95	30.13	24.47	21.24	26.90	24.03
B.Ed or Equivalent	32.06	30.72	30.93	30.60	26.92	28.96	40.98	37.30	37.22
M.Ed or Equivalent	2.53	2.71	2.56	2.24	2.25	2.22	4.28	3.49	3.63
Others	2.75	3.38	2.96	2.65	3.11	2.77	3.34	3.86	3.55
No Response	17.71	15.15	18.15	17.91	15.65	18.16	16.46	14.29	18.07

Note: Totals may not add to hundred because of rounding of figures.

Table D15
Professional Qualification of Primary School Teachers (Regular) : 2006-07

Qualification	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
J.B.T or Equivalent	34.88	27.83	32.02	35.43	29.59	33.39	28.95	23.34	25.07
S.B.T or Equivalent	20.56	29.55	24.20	20.50	29.79	23.74	21.25	28.92	26.56
B.Ed or Equivalent	21.63	21.75	21.68	21.07	19.42	20.49	27.67	27.69	27.69
M.Ed or Equivalent	1.12	1.35	1.21	1.07	1.19	1.11	1.64	1.75	1.72
Others	2.56	3.01	2.74	2.59	2.78	2.66	2.25	3.58	3.18
No Response	19.25	16.51	18.14	19.34	17.22	18.60	18.24	14.71	15.79

Note: Totals may not add to hundred because of rounding of figures.

Further, the state-specific distribution of teachers in Primary schools by academic qualifications reveals that a few states, such as Assam (males 10.42 percent, females 11.08 percent), Daman & Diu (males 13.51 percent, females 9.09 percent), Gujarat (males 6.36 percent, females 7.47 percent), Haryana (males 11.19 percent, and females 19.80 percent); Meghalaya (males 15.87 percent, and females, 17.74 percent); Mizoram (males 20.42 percent, females 30.79 percent); Nagaland (males 17.57 percent, females 12.78 percent); Punjab (males 11.74 percent, females 16.50 percent); and Tripura (males 34.50 percent, females 29.91 percent), have a significant percentage of teachers below Secondary level. Majority of primary teachers in these and a few other states, such as Assam (males 56.28 percent, females 56.01 percent), Goa (males 57.29, females 55.95 percent), Gujarat (males 48.93 percent, females 47.65 percent), Himachal Pradesh (males 43.73 percent, females 39.84 percent), Lakshadweep (males

Table D15 (A)

Percentage of Regular and *Para*-Teachers with Professional Qualification : 2006-07

State/UT	All Teachers (Regular & *Para*-Teachers)	Only Regular Teachers	*Para*-Teachers			
			Under All Managements	In Government Schools	In Government Aided Schools	In All Private Un-aided Schools
Andaman & Nicobar Islands	97.87	97.93	94.12	93.62	100.00	100.00
Andhra Pradesh	85.23	92.68	39.21	38.95	91.67	74.06
Arunachal Pradesh	35.02	37.21	21.42	21.61	50.00	6.06
Assam	39.77	41.54	15.72	15.75	9.77	19.42
Bihar	62.78	64.78	51.51	51.46	79.05	34.25
Chandigarh	99.14	99.17	96.72	96.15	100.00	96.97
Chhattisgarh	56.66	58.81	46.39	48.11	47.48	31.15
Dadra & Nagar Haveli	86.80	87.05	79.41	100.00	0.00	66.67
Daman & Diu	68.29	69.92	37.50	50.00	35.71	50.00
Delhi	99.14	99.17	98.53	98.32	97.88	98.86
Goa	92.34	92.48	82.29	70.00	95.65	70.00
Gujarat	96.03	96.05	94.12	98.42	94.06	89.92
Haryana	88.85	88.90	84.75	94.07	64.81	38.13
Himachal Pradesh	92.99	95.68	77.77	77.95	100.00	74.29
Jammu & Kashmir	50.72	53.18	42.10	42.24	-	34.00
Jharkhand	67.14	86.65	36.19	36.00	67.86	47.23
Karnataka	99.85	99.86	92.00	92.31	100.00	90.48
Kerala	96.97	96.95	97.89	98.55	97.19	96.91
Lakshadweep	88.73	88.65	100.00	100.00	-	-
Madhya Pradesh	60.09	60.17	59.33	65.36	57.39	42.82
Maharashtra	87.95	87.86	97.49	97.92	97.71	95.42
Manipur	39.43	39.64	23.86	39.66	7.76	24.32
Meghalaya	33.81	34.52	22.35	26.68	20.50	23.00
Mizoram	60.48	70.61	16.61	26.05	12.26	3.06
Nagaland	15.92	15.93	13.82	13.19	-	15.63
Orissa	89.74	89.82	65.82	66.87	40.00	33.33
Puducherry	93.92	94.11	86.10	91.23	100.00	77.14
Punjab	93.27	93.64	74.51	76.62	79.03	55.56
Rajasthan	86.00	86.10	84.99	87.93	76.47	65.36
Sikkim	37.09	37.22	11.76	12.77	0.00	0.00
Tamil Nadu	95.40	95.46	90.35	95.18	94.29	86.76
Tripura	38.47	39.11	19.75	19.88	12.50	18.64
Uttar Pradesh	75.25	88.73	35.71	35.40	61.15	66.39
Uttarakhand	71.13	73.96	29.27	30.08	30.53	24.07
West Bengal	71.02	75.71	22.24	21.03	23.62	11.11
All States*	**78.21**	**81.85**	**44.88**	**44.29**	**44.21**	**54.91**

*Percentage is computed based on all teachers including those who have not responded and reported not having professional qualification.

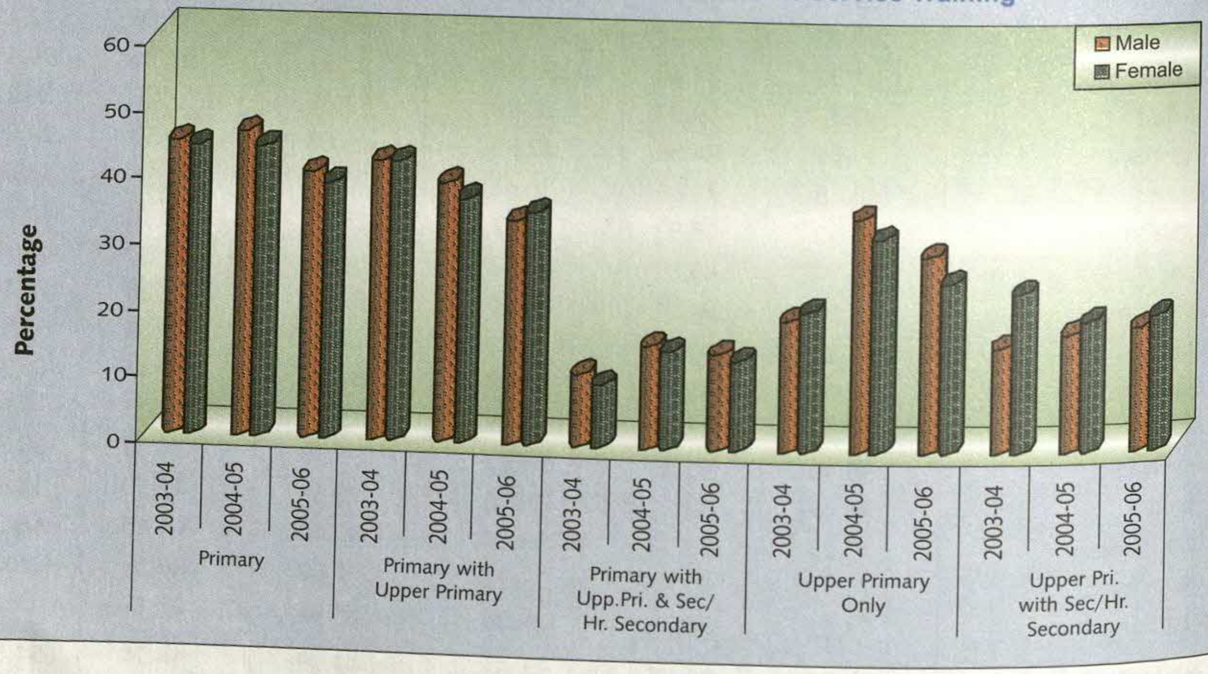
76.07 percent, females 72.46 percent), Maharashtra (males 39.77 percent, females 40.31 percent) and Orissa (males 48.18 percent, females 46.28 percent), have the Secondary level qualification which is also true for a few north-eastern states. On the other hand, in a few states, such as Andhra Pradesh, Chandigarh, Delhi, Puducherry, Rajasthan, Uttar Pradesh and Uttarakhand, majority (above 50 percent) of Primary school teachers are

Table D16
Percentage of Teachers Provided In-Service Training : 2005-06

School Category	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary Only	39.90	38.38	39.28	40.82	41.89	41.20	28.73	27.61	27.96
Primary with Upper Primary	33.99	34.73	34.32	36.58	42.33	38.73	19.26	21.59	20.80
Primary with Upper Primary & Secondary/ Hr. Secondary	14.18	13.26	13.68	16.81	19.94	18.05	9.14	9.34	9.28
Upper Primary Only	29.22	25.18	27.66	30.51	29.40	30.16	19.90	17.18	18.16
Upper Primary & Secondary/ Hr. Secondary	18.38	20.06	18.99	20.02	25.26	21.54	12.78	13.59	13.21
All Schools (2006-07)	**33.22**	**32.30**	**32.29***	**35.37**	**38.49**	**36.06**	**19.14**	**20.27**	**19.18**
All Schools (2005-06)	37.88	43.97	37.03	40.62	49.57	41.44	18.94	32.80	20.44
All Schools (2004-05)	36.50	44.34	37.37	38.99	49.55	42.07	18.57	34.54	21.12
All Schools (2003-04)	33.09	44.70	33.64	35.11	49.73	37.20	18.32	35.53	20.29

* May not match with the DISE Flash Statistics : 2006-07 because of limitations in the compilation of data.

Figure 4.10
Percentage Distribution of Teachers Received In-Service Training



Graduates and above. Uttarakhand has more Post-Graduate Primary school teachers than teachers having Graduate degrees and the percentage of such female teachers is more than their male counterparts.

> "More than 78 percent of the total teachers who impart elementary education possess one or the other professional qualification compared to 45 percent in case of *para*-teachers"

Percentage of teachers by professional qualifications (excluding *para*-teachers) presented in Tables D14 and D15 suggests that about 40.98 percent male and 37.30 percent female teachers (all categories) in urban areas are B.Ed or equivalent, compared to 30.60 percent male and 26.92 percent female teachers in rural areas. Both together show that 37 and 29 percent teachers respectively in the urban and rural areas have such degrees. It has also been noticed that percentage of such teachers in the urban areas is higher than the same in the rural areas. The corresponding figures in case of teachers at Primary level are 27.67 percent male and 27.69 percent female teachers (total 27.69 percent). In case of integrated Higher Secondary schools, as many as 43.65 percent male and 47.91 percent female teachers had B.Ed or equivalent degree in 2006-07, compared to 45.93 percent in case of all teachers. Upper Primary attached to Secondary and Higher Secondary schools also have 60.33 percent (60.45 male and 60.10 female) teachers with B.Ed degree. Further, it is noticed that compared to teachers having B.Ed degree, the percentage of teachers having M.Ed degree across school types is low. On the other hand, a good number of teachers are J.B.T or equivalent which is true both for all categories and Primary teachers. Considering all teachers together, only 1.21 percent teachers in Primary schools have M.Ed or equivalent degree compared to 1.94 percent in independent Elementary, 3.29 percent in integrated Higher Secondary, 7.35 percent in Upper Primary and 4.17 percent in Upper Primary attached to Secondary and Higher Secondary schools. The percentage of no response in each school category indicates that a fairly good number of regular teachers do not possess any

Table D17

Distribution of *Para*-Teachers by School Category : 2006-07

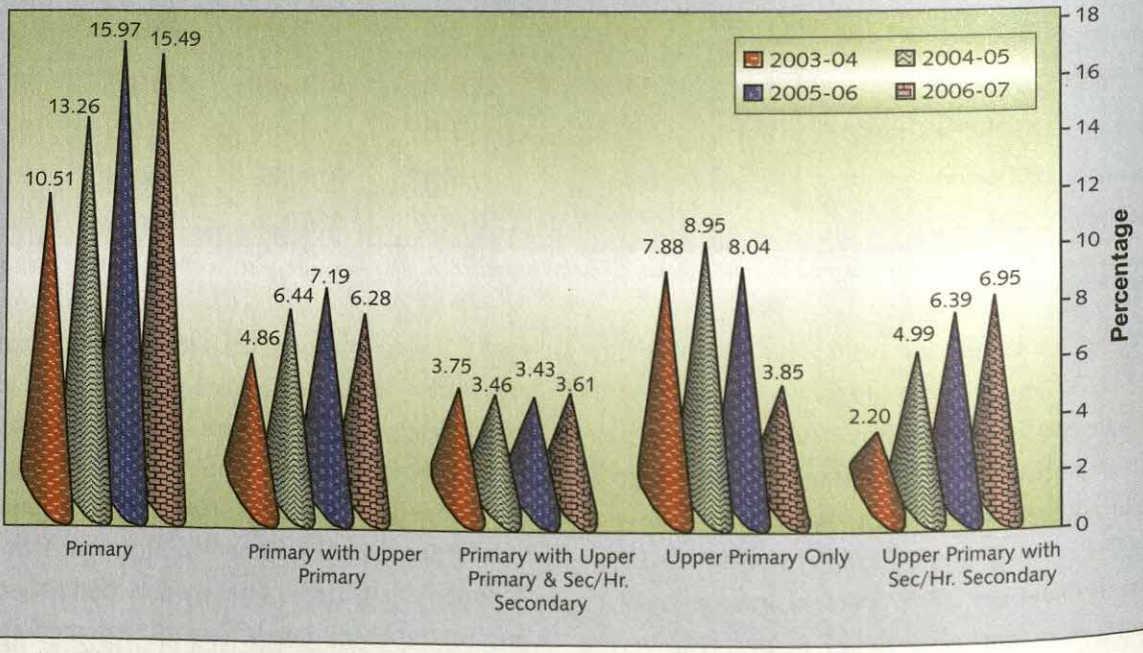
School Category	Number of Para-Teachers				
	Male	Female	Total	Rural Areas	%age in Rural Areas
Primary Only	201008	150228	351236	338041	96.24
Primary with Upper Primary	51289	38499	89788	79116	88.11
Primary with Upper Primary & Secondary/ Hr. Secondary	4950	5948	10898	6049	55.51
Upper Primary Only	12906	8125	21031	18361	87.30
Upper Primary & Secondary /Hr. Secondary	22648	17996	40644	34269	84.32
No Response	30	11	41	23	56.10
All Schools (2006-07)	**292831**	**220807**	**513638**	**475859**	**92.64**
All Schools (2005-06)	305973	192971	498944	464535	93.10
All Schools (2004-05)	241926	135740	379385	346824	91.42
All Schools (2003-04)	167730	91369	259099	240734	92.91

Note: Rural and urban totals may not add to total number of *para*-teachers because of no responses in these areas and also in male and female categories.

Table D18
Percentage of *Para*-Teachers to Total Teachers : 2006-07

School Category	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary Only	14.99	16.20	15.49	15.84	20.26	17.44	4.67	3.71	4.01
Primary with Upper Primary	6.46	6.06	6.28	7.04	7.86	7.34	3.21	2.95	3.04
Primary with Upper Primary & Secondary /Hr. Secondary	3.54	3.67	3.61	3.73	4.37	3.98	3.16	3.26	3.23
Upper Primary Only	3.84	3.86	3.85	4.02	4.72	4.24	2.58	2.22	2.35
Upper Primary & Secondary/ Hr.Secondary	6.08	8.48	6.95	6.98	12.04	8.44	3.00	4.06	3.56
No Response	3.69	1.99	1.35	4.86	3.36	1.69	1.23	0.00	0.98
All Schools (2006-07)	**9.81**	**10.28**	**9.86**	**10.78**	**13.87**	**11.87**	**3.47**	**3.30**	**3.36**
All Schools (2005-06)	11.21	10.47	10.91	12.29	14.00	12.87	3.81	3.42	3.27
All Schools (2004-05)	10.04	8.53	9.09	10.91	11.27	10.72	3.87	3.29	3.27
All Schools (2003-04)	7.91	6.98	7.06	8.56	9.32	8.31	3.01	2.41	2.36

Figure 4.11
Percentage of *Para*-Teachers to Total Teachers : All States



professional qualification. The percentage of such teachers (both regular and *para*-teachers) is 21.79, compared to 18.15 percent in case of regular teachers of all categories). The state-wise percentage of teachers with professional qualifications is presented in Table D15 (a). It reveals that more than 78 percent of the total teachers who impart elementary education possess one or the other professional qualification compared to 45 percent in case of *para*-teachers. In case of only regular teachers, the percentage is as high as 81.85. The state-specific percentages reveal that majority of regular teachers in all the north-eastern states, including Assam as well as in Jammu & Kashmir, Chhattisgarh etc. are yet to attain professional qualification, which is also true in case of *para*-teachers.

Table D19

Academic Qualification of All Category *Para*-Teachers : 2006-07

Qualification	Percentage								
	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below Secondary	3.18	3.00	3.10	3.20	3.09	3.15	2.79	2.28	2.46
Secondary	9.32	10.85	9.98	9.43	11.03	10.09	7.12	9.36	8.54
Higher Secondary	33.39	36.52	34.73	34.02	38.30	35.79	20.39	22.01	21.42
Up to Higher Secondary Level	**45.89**	**50.37**	**47.81**	**46.65**	**52.42**	**49.03**	**30.30**	**33.65**	**32.42**
Graduate	39.42	35.30	37.65	39.04	34.32	37.09	47.26	43.30	44.74
Post- Graduate	13.81	13.49	13.67	13.50	12.52	13.10	20.02	21.49	20.95
Graduate & Post-Graduates	**53.23**	**48.79**	**51.32**	**52.54**	**46.84**	**50.19**	**67.28**	**64.79**	**65.69**
M.Phil/ Ph.D	0.39	0.41	0.40	0.38	0.37	0.37	0.72	0.81	0.78
Others	0.21	0.23	0.22	0.19	0.20	0.20	0.59	0.47	0.51
No Response	0.29	0.19	0.24	0.24	0.18	0.22	1.11	0.29	0.59

Note: Totals may not add to hundred because of rounding of figures.

In-Service Training of Teachers

As many as 1.69 million teachers had undergone in-service training in 2005-06 compared to 1.70 million in 2004-05. In other words, about 33.22 percent male and 32.30 percent female teachers (all categories) were imparted in-service training during the year 2005-06, compared to 37.88 percent male and 43.97 percent female teachers in 2004-05. In percentage terms, more female teachers were imparted in-service training than their male counterparts which, is true both for rural and urban areas. More than 71 percent teachers in Gujarat (males 79.05 percent and females, 64.54 percent) underwent in-service training, the highest amongst all the states. The percentage of such teachers in Sikkim was the lowest (0.58 percent). Their percentage was as high as 59.49 percent in Kerala, 50.46 percent in Uttarakhand, 45.99 in Tamil Nadu, 55.02 percent in Himachal Pradesh and 52.06 percent in Orissa, and as low as 7.89 percent in Arunachal Pradesh and 8.22 percent in Meghalaya. Delhi (28.38 percent), Chandigarh (12.80 percent) etc. too have a very low percentage of teachers having been imparted in-service training during the previous year.

The highest percentage of teachers imparted in-service training is noticed in case of teachers in Primary schools (total 39.28 percent; male 39.90 percent, and female 38.38 percent), followed by independent Elementary schools (total 34.32 percent; male 33.99 percent; and females 34.73 percent), Upper Primary schools (total 27.66 percent; male 29.22 percent; and female 25.18 percent), Upper Primary attached to Secondary and Higher Secondary schools (total 18.99 percent; male 18.38 percent; and female 20.06 percent) and integrated Higher Secondary schools (total 13.68 percent; male 14.18 percent; and female 13.26 percent) (Table D16).

Both male and female teachers together, numbering about 45 percent teachers in the Primary schools, received in-service training during the previous academic year. The percentage of such teachers has been much higher in rural areas (41.20 percent) than the same in case of urban areas (27.96 percent). Further, it has also been observed that a good number of Primary school teachers in government managed schools received in-service training (male 44.26, female 45.26 percent), compared to only 10.33 percent males and 17.52 percent

Figure 4.12
Percentage of *Para*-Teachers by Educational Qualification : All States

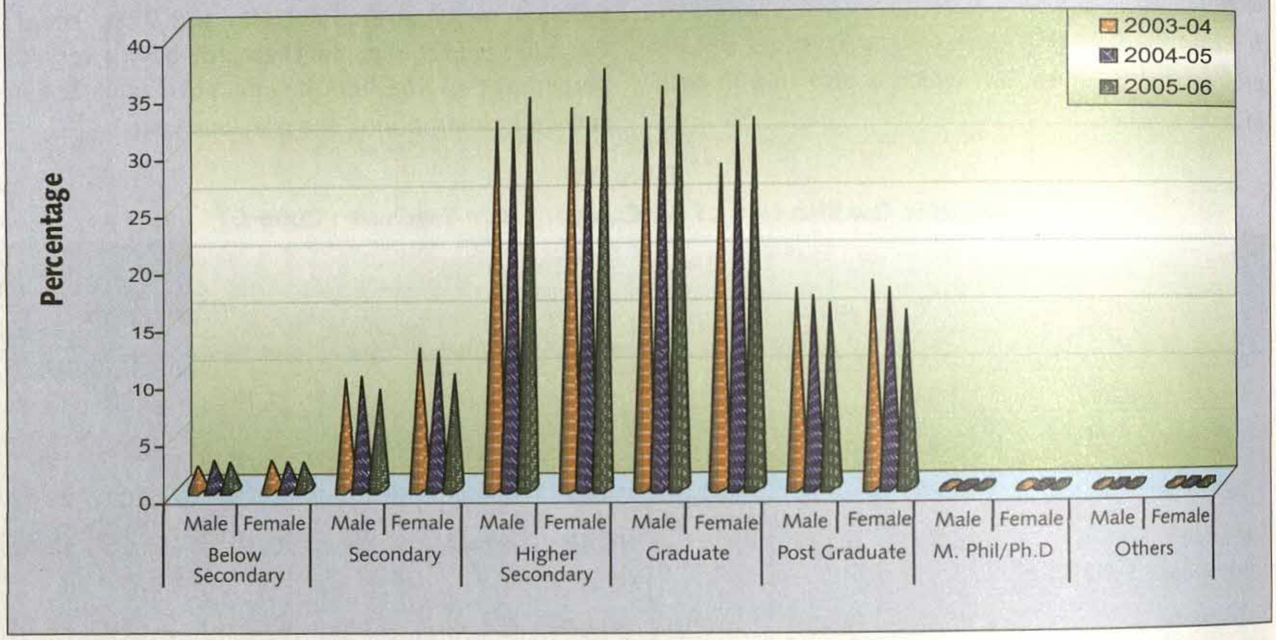


Table D20
Academic Qualification of Primary School *Para*-Teachers : 2006-07

Qualification	Percentage								
	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below Secondary	3.86	3.52	3.71	3.85	3.53	3.72	4.06	3.24	3.53
Secondary	10.40	11.28	10.77	10.40	11.07	10.68	10.41	14.78	13.20
Higher Secondary	37.93	41.49	39.45	38.15	42.05	39.79	28.88	32.19	31.00
Up to Higher Secondary Level	**52.19**	**56.29**	**53.93**	**52.40**	**56.65**	**54.19**	**43.35**	**50.21**	**47.73**
Graduate	34.35	30.97	32.90	34.20	30.72	32.74	40.85	35.08	37.16
Post Graduate	12.84	12.11	12.53	12.79	12.01	12.46	14.82	13.86	14.21
Graduate & Post Graduates	**47.19**	**43.08**	**45.43**	**46.99**	**42.73**	**45.20**	**55.67**	**48.94**	**51.37**
M.Phil/ Ph.D	0.32	0.33	0.32	0.32	0.32	0.32	0.34	0.43	0.39
Others	0.13	0.14	0.13	0.13	0.12	0.13	0.29	0.32	0.31
No Response	0.17	0.17	0.17	0.17	0.17	0.17	0.36	0.11	0.20

Note: Totals may not add to hundred because of rounding of figures.

female teachers in private managed schools. A few states, such as Andhra Pradesh (55 percent), Goa (68 percent), Gujarat (73 percent), Himachal Pradesh (68 percent), Kerala (66 percent), Tamil Nadu (64 percent) and Uttarakhand (62 percent), have had a much higher percentage of trained teachers (Primary) than the average of all districts (39.28 percent). On the other hand, the percentage of trained teachers in the states of Arunachal Pradesh (11 percent), Bihar (44 percent), Chhattisgarh (36 percent), Karnataka (17 percent), Meghalaya (10 percent) and Uttar Pradesh (18 percent) has been very low as the majority of Primary school teachers in these states were not provided in-service training during the pervious year. All the north-eastern states too have a lower percentage of teachers having been imparted in-service training than the all-India average of 39.

Table D21

Percentage of *Para*-Teachers with Professional Qualification by School Category : 2006-07

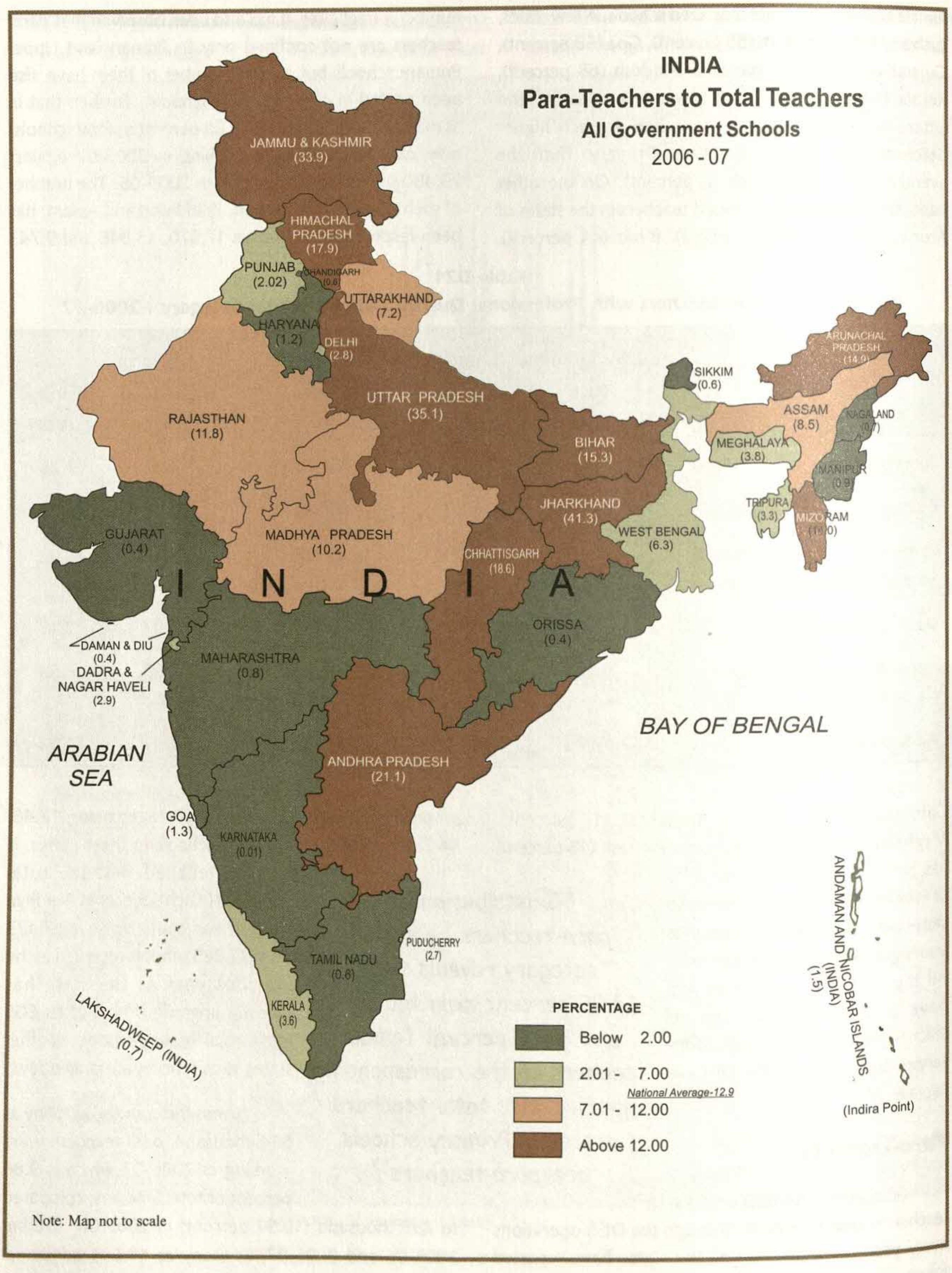
School Category	Percentage				
	Male	Female	All Areas	Rural Areas	Urban Areas
Primary Only	45.53	38.19	**42.39**	14.57	9.28
Primary with Upper Primary	86.30	48.42	**47.22**	7.39	9.79
Primary with Upper Primary & Secondary/ Hr. Secondary	98.92	68.49	**62.97**	13.17	26.62
Upper Primary Only	97.48	63.42	**61.78**	1.37	3.19
Upper Primary & Secondary/ Hr. Secondary	94.63	43.67	**48.51**	7.53	6.58
All Schools	**47.05**	**42.17**	**44.88**	**55.97**	**44.53**

> "Distribution of *para*-teachers by school category reveals that 14.99 percent male teachers and 16.20 percent female teachers of the corresponding gender-wise total teachers posted in Primary schools are *para*-teachers"

Para-Teachers

Comprehensive data on *para*-teachers is being collected through the DISE operations every year. It reveals that all the states have reported information on *para*-teachers though in a few states there number is negligible. It has also been observed that *para*-teachers are not confined only to Primary and Upper Primary schools but a good number of them have also been posted in other types of schools. Further, that in as many as 70,338 schools (5.88 percent of total schools) only *para*-teachers were working in 2006-07 against 79,480 schools (7.07 percent) in 2005-06. The number of such schools in Rajasthan, Jharkhand and Assam, has been respectively as high as 17,570, 13,946 and 9,743 schools, their corresponding percentages being 17.40, 34.33 and 15.22 of the total schools in these states. It may be recalled that the total number of such schools in Madhya Pradesh has come down to 7,423 from 37,285 schools reported in the previous year as the state has recently upgraded most of its EGS into formal Primary schools. In other states such schools are only a few.

Across the country, as many as 514 thousand *para*-teachers were working in 2006-07 which is 9.86 percent of total teachers, compared to 499 thousand (10.91 percent) in 2005-06. During 2005-06 and 2006-07, as many as 14,694 additional *para*-teachers were appointed which shows an increase


INDIA
Para-Teachers to Total Teachers
All Government Schools
2006 - 07
JAMMU & KASHMIR (33.9)
HIMACHAL PRADESH (17.9)
PUNJAB (2.02)
CHANDIGARH (0.6)
UTTARAKHAND (7.2)
HARYANA (1.2)
DELHI (2.8)
UTTAR PRADESH (35.1)
RAJASTHAN (11.8)
SIKKIM (0.6)
ARUNACHAL PRADESH (14.0)
ASSAM (8.5)
NAGALAND (0.7)
MEGHALAYA (3.8)
MANIPUR (0.9)
TRIPURA (3.3)
MIZORAM [illegible]
BIHAR (15.3)
JHARKHAND (41.3)
WEST BENGAL (6.3)
GUJARAT (0.4)
MADHYA PRADESH (10.2)
CHHATTISGARH (18.6)
I N D I A
ORISSA (0.4)
DAMAN & DIU (0.4)
DADRA & NAGAR HAVELI (2.9)
MAHARASHTRA (0.8)
BAY OF BENGAL
ARABIAN SEA
ANDHRA PRADESH (21.1)
GOA (1.3)
KARNATAKA (0.01)
ANDAMAN AND NICOBAR ISLANDS (INDIA) (1.5)
PUDUCHERRY (2.7)
TAMIL NADU (0.6)
KERALA (3.6)
LAKSHADWEEP (INDIA) (0.7)
PERCENTAGE
Below 2.00
2.01 - 7.00
National Average-12.9
7.01 - 12.00
Above 12.00
(Indira Point)
Note: Map not to scale

Map 4.4

of 2.95 percent over the total *para*-teachers in the previous year. Of the total *para*-teachers, 57 percent are male and the remaining 43 percent are female teachers. The respective percentage of male and female *para*-teachers to total male and female teachers works out to be 9.81 and 10.28, which is quite similar to the corresponding figures in the previous year. In other words, about 10 percent of total teachers (all categories) are *para*-teachers compared to 11 percent in the previous year. It may also be of interest to know that 93 percent of the total *para*-teachers have been posted in rural areas. Urban areas had only 37.8 thousand *para*-teachers in 2006-07, compared to 475.8 thousand in rural areas (Table D17). In percentage terms, it is very high in rural areas (11.87 percent) than the same in urban areas (3.36 percent). In rural areas, the percentage of female *para*-teachers has been very high in a few school types, such as Primary (17.44 percent) but the same is not true in case of female *para*-teachers in urban areas. The percentage of female *para*-teachers in Primary schools in urban areas has been as low as 4.01.

Table D22
Professional Qualification of *Para*-Teachers (All Categories) : 2006-07

Qualification	Percentage								
	All Areas			Rural Areas			Urban Areas		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
J.B.T or Equivalent	14.47	13.86	**14.18**	14.69	14.46	**14.57**	10.09	8.97	**9.28**
S.B.T or Equivalent	8.48	6.40	**7.57**	8.41	5.97	**7.39**	9.96	9.85	**9.79**
B.Ed or Equivalent	15.40	12.61	**14.17**	14.9	10.77	**13.17**	25.55	27.67	**26.62**
M.Ed or Equivalent	1.54	1.47	**1.51**	1.46	1.25	**1.37**	3.17	3.25	**3.19**
Others	7.16	7.83	**7.46**	7.22	7.92	**7.53**	5.85	7.07	**6.58**
No Response*	52.95	57.83	**55.12**	53.32	59.63	**55.97**	45.37	43.18	**44.53**

* Including teachers without professional qualifications.

Table D23
SC & ST Teachers Employed in Government and Private Managed Schools : 2006-07

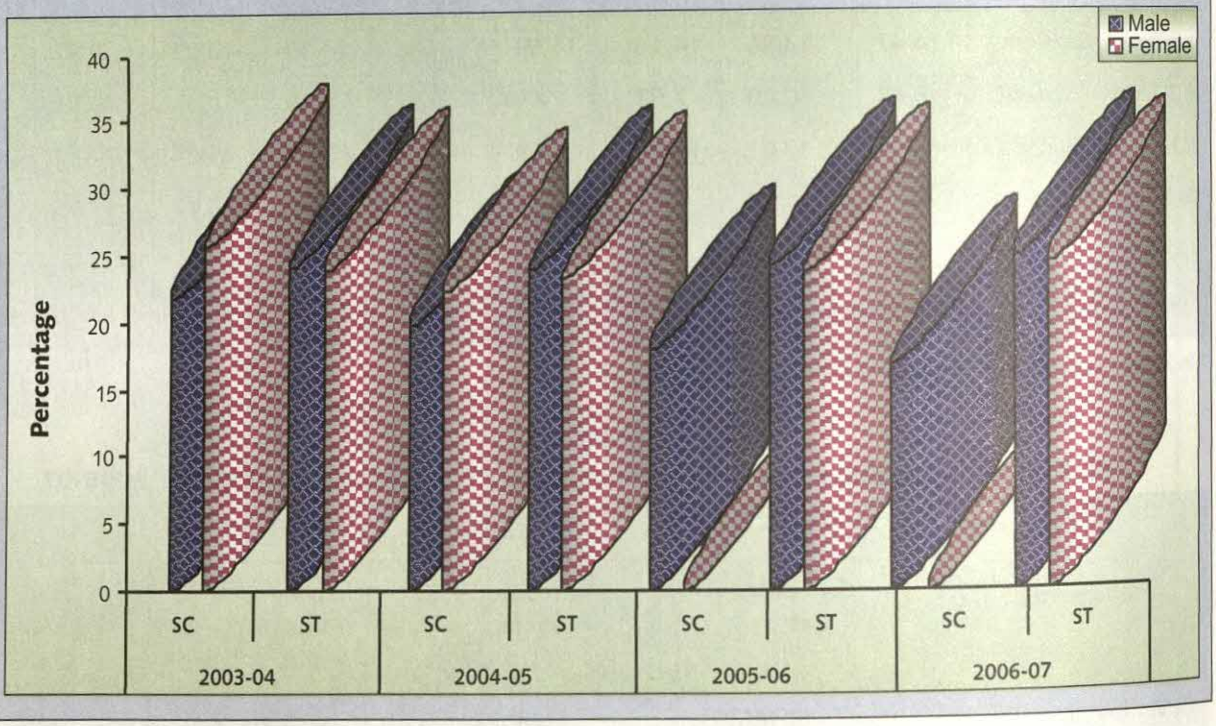
Management	Number of Teachers			
	Scheduled Castes	Scheduled Tribes	Scheduled Castes & Scheduled Tribes	Other Backward Class
Government Managements	501652	378026	879678	1149745
Percentage	78.81	82.16	80.22	68.85
Private	134329	81106	215435	517999
Managements Percentage	21.10	17.63	19.64	31.01
All Managements	636511	460105	1096616	1669982
% to Total Teachers	**12.20**	**8.82**	**21.01**	**32.00**

Note: Total may not add to 100 because of missing values as percentages are worked out based on total teachers.

The state-specific number of *para*-teachers reveals that majority of *para*-teachers have been appointed in the states of Andhra Pradesh (71,296; 13.88 percent of total *para*-teachers), Bihar (35,642; 6.93 percent)), Chhattisgarh (22,612; 4.40 percent), Jharkhand (50,911; 9.91 percent), Madhya Pradesh (37,898; 7.38 percent, compared to 1,19,212 in 2005-06), Rajasthan (34,775; 6.77 percent), Uttar Pradesh (1,54,757; 30.13 percent, compared to 95,773 in 2005-06), and West Bengal (22,192; 4.32 percent) which together constitute a total of 457 thousand *para*-teachers, i.e. 89 percent of the total *para*-teachers across 35 States and UTs. Compared to these states, other states, except Assam (15,158 *para*-teachers) and Himachal Pradesh (8,875 *para*-teachers), have only a fewer number of *para*-teachers.

Notably, *para*-teachers are not confined only to Primary schools. A good number of other types of schools also have *para*-teachers as in 2006-07. However, majority of them have been posted in Primary schools. A total 351 thousand *para*-teachers are posted in the Primary schools, which is 68 percent of total *para*-teachers in the country. The distribution of *para*-teachers by school category reveals that 14.99 percent male teachers and 16.20 percent female teachers of the corresponding gender-wise total teachers posted in Primary schools are the *para*-teachers. About 57 percent of the total *para*-teachers in Primary schools are male and the balance 43 percent are female teachers. Their combined percentage is about 15.49, which means that more than 15 out of every 100 teachers in Primary schools are *para*-teachers, of which 17 out of 100 are in rural areas and 4 out of 100 are in urban areas. Their number is more than 89.8 thousand in case of Elementary schools, which amounts to 6.28 percent of the total teachers in Elementary schools. On the other hand, as many as 21,031 *para*-teachers are posted in independent Upper Primary schools which is 6.28 percent of the total teachers in such schools. Compared to Primary schools, Upper Primary and Elementary schools, integrated Higher Secondary, and Upper Primary attached to Secondary & Higher Secondary schools have much less number of *para*-teachers. In both these types of schools, about 10.9 thousand and 40.6 thousand *para*-teachers were

Figure 4.13
Percentage of SC & ST Teachers (All Schools) : All States



appointed in 2006-07, which respectively works out to be 3.61 and 6.95 percent of the total teachers in these schools (Table D18).

Further, it is observed that Andhra Pradesh, Bihar, Delhi, Jammu & Kashmir, Mizoram and Uttar Pradesh have an average of one *para*-teacher in its all category schools. It is also true for Primary schools in case of Bihar, Jammu & Kashmir, Jharkhand, Mizoram and Uttar Pradesh. The respective percentage of male and female *para*-teachers in Primary schools in Chhattisgarh is as high as 18.87 and 24.02. Arunachal Pradesh too has a high percentage of male *para*-teachers, 19.76, and female *para*-teachers, 31.02. Their respective percentages are 15.28 and 22.75 in Bihar, 23.31 and 12.52 in Rajasthan, 23.90 and 16.18 in Himachal Pradesh, and 26.85 and 47.09 in Uttar Pradesh. Compared to high percentage in these states, the percentage of *para*-teachers to total teachers in the remaining states is low. Kerala has only 2.44 percent *para*-teachers against 0.69 percent in Gujarat. The percentage of male and female para-teachers to total teachers in Delhi comes to be 3.30 and 3.11. All the states in the north-eastern region of the country also reported information on *para*-teachers in all types of its schools; the percentage of *para*-teachers to total teachers in these states (except Arunachal Pradesh and Mizoram) is quite low as compared to other states. Daman & Diu, Dadra & Nagar Haveli, and Lakshadweep hardly have any *para*-teacher in its Primary schools.

> "A good number of schools are either single-classroom or single-teacher schools despite availability of an average of 4 teachers per school, all of which need serious intervention. May be rationalization of teachers is the only solution"

Academic Qualification of *Para*-Teachers

The distribution of *para*-teachers by school category reveals that they are almost equally qualified as regular teachers. About 44.27 percent regular male teachers, 45.32 percent regular female teachers and 44.71 percent all regular teachers have up to Higher Secondary education. The percentage in case of *para*-teachers is 45.89 percent male, 50.37 percent female and 47.81 all *para*-teachers. The distribution of teachers below Higher Secondary level further reveals that the percentage in case of regular teachers is slightly lower than that of the *para*-teachers. However, the percentage of such *para*-teachers in Primary schools is lower than that of the regular teachers. Only 3.18 percent male and 3.00 percent (all categories) female *para*-teachers are below Secondary level, compared to 2.86 male and 3.01 percent female regular teachers. The percentage in case of regular Primary teachers is still higher at 3.99 male and 4.33 female teachers. The corresponding percentages of primary *para*-teachers are 3.86 male, 3.52 female teachers. About 53.23 percent male and 48.79 percent female *para*-teachers are Graduates and Post Graduates, compared to 54.49 percent male and 53.25 percent female regular (all categories) teachers. This shows that more than 51 percent *para*-teachers have Graduate and Post Graduate degrees, compared to 54 percent in the case of regular teachers. In urban areas, the percentage of such *para*-teachers is favourably much higher at 65.69 compared to 50.19 in the rural areas. Though the number is small, a few regular (0.42 percent male and 0.54 percent female) and *para*-teachers (0.39 percent male and 0.41 percent female) are even M.Phil/Ph.D degree holders. This is also true in case of teachers in Primary schools (Tables D19 & D20).

The state-specific distribution of *para*-teachers by qualifications suggests that a few states have higher percentage of teachers below Secondary level than the average of all districts (3.10 percent). Arunachal Pradesh, Dadra & Nagar Haveli, Haryana, Jharkhand, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, and Tripura are such states. On the other hand, Chhattisgarh (1.88 percent), Delhi (0.63 percent), Himachal Pradesh (0.75 percent), Jammu & Kashmir (0.32 percent), Karnataka (2.00 percent), Orissa (1.79 percent), Uttarakhand (0.68 percent) and West Bengal (1.83 percent) have lower percentage of *para*-teachers with below Secondary level qualifications. Comparatively, percentage of such teachers in other school types is still lower in Primary schools (3.71 percent).

On the other hand, it is observed that in a number of states, the number of *para*-teachers with Secondary qualification is much higher than the national average (9.98 percent). Arunachal Pradesh, Andhra Pradesh, Assam, Daman & Diu, Gujarat, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Mizoram, Nagaland, Orissa, Tripura and West Bengal are a few such states. On the other hand more than 50 percent teachers in the states of Goa, Lakshadweep, Manipur, Sikkim and West Bengal are Graduates compared to the national average of 37.65 percent. In Chandigarh and Delhi, more than half of the total teachers that impart elementary education are Post-Graduates. Chhattisgarh, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Puducherry, Punjab, Rajasthan, Tamil Nadu and Uttarakhand too have a good number of Post-Graduate *para*-teachers.

> "About 87 out of 100 teachers in rural areas and 93 out of 100 teachers in the urban areas were not involved in non-teaching assignments. Not much difference is observed in the number of days spent on non-teaching assignments across school types."

Professional Qualifications of *Para*-Teachers

Para-teachers though are academically equally or better qualified than the regular teachers, but many of them do not possess professional qualifications. Not much difference is observed across school types between male and female *para*-teachers. However, the percentage of *para*-teachers without professional qualifications is a bit low in urban areas than the same in rural areas. The percentage of such teachers in urban areas in case of male teachers is 45.37 and in case of female teachers 43.18. The corresponding figures in rural areas are 53.32 percent for male and 59.63 percent for female teachers. It is also interesting to note that 11.96 percent male *para*-teachers and 7.50 percent female *para*-teachers in Primary schools have B.Ed or equivalent degrees. Percentage of such *para*-teachers is a little higher in urban areas (17.60 percent male and 17.35 percent female *para*-teachers) than in rural areas (11.82 percent male and 6.92 percent female *para*-teachers). In addition, about 1 percent *para*-teachers in the Primary schools have M.Ed or equivalent degrees. The percentage of *para*-teachers with M.Ed degrees is slightly higher in case of other school types. About 17 percent *para*-teachers teaching in Primary schools are J.B.T or equivalent and another 8.21 percent male and 4.62 percent female teachers have S.B.T or equivalent qualifications (Tables D21 and D22). State-specific percentages of *para*-teachers [Table D15 (a)] reveal that in the majority of states all such teachers are yet to attain professional qualifications. However, in Delhi, Gujarat, Haryana, Karnataka, Maharashtra, Rajasthan and Tamil Nadu and in a few smaller states, above 90 percent *para*-teachers possess professional qualifications. But the percentage of such *para*-teachers is as low as 35.71 percent in Uttar Pradesh, 29.27 percent in Uttarakhand and 22.24 percent in West Bengal.

Distribution of Teachers by Caste

The caste distribution of teachers (including *para*-teachers) is presented in Table D23. This has also been presented in case of all government and private managements together. The data reveals that government is the main employer of both Scheduled Castes and Scheduled Tribes teachers as majority of SC and ST teachers (all categories) are employed in schools run by government managements. However, the percentage of OBC teachers is comparatively lower than the same in case of Scheduled Castes and Scheduled Tribes teachers. About 79 percent SC and 82 percent ST teachers are employed respectively in the government and private managed schools. The share of SC and ST teachers together in government schools is 80 percent, compared to about 20 percent in case of private managed schools. As many as 0.64 million SC and 0.46 million ST teachers are engaged in imparting elementary education, respectively representing 12.20 percent and 8.82 percent of the total teachers. Altogether, there are about 1.10 million SC and ST teachers, which is 19.64 percent of the total teachers that impart elementary education in the country. The percentage of OBC teachers in government managed schools stands at 69 percent compared to 31 percent in case of private managed schools.

Teachers Involvement in Non-Teaching Assignments

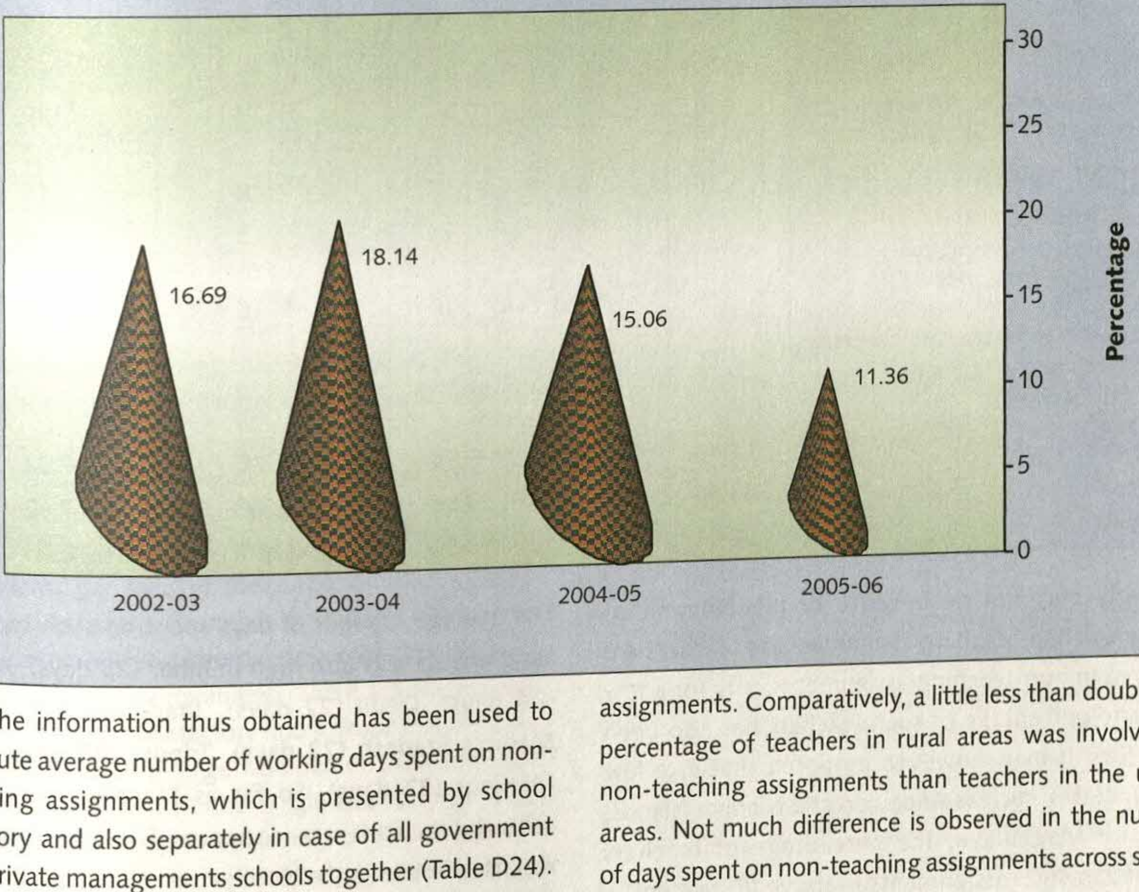
It is a common belief that teachers in general and Primary school teachers in particular, hardly get time for teaching because they are mostly involved in non-teaching assignments. Through the DISE 2006-07 operations, information was collected from all teachers on the number of working days spent on non-teaching assignments during the previous academic year i.e. 2005-06. The information thus obtained has been used to compute average number of working days spent on non-teaching assignments, which is presented by school category and also separately in case of all government and private managements schools together (Table D24). While computing the average number of days, only those teachers are considered who were involved in non-teaching assignments during the previous year, that is, in 2005-06. The percentage of such teachers is also presented separately both in case of rural and urban areas (Table D24).

Table D24 reveals that majority of teachers imparting elementary education across 35 States and Union Territories were not involved in non-teaching assignments in 2005-06 which is also true for previous years. The percentage of such teachers (all categories) has been as low as 11.36 (15.06 percent in previous year) compared to 12.63 percent in rural and only 6.98 percent in urban areas. This suggests that 87 out of 100 teachers in rural areas and 93 out of 100 teachers in the urban areas were not involved in non-teaching assignments. Comparatively, a little less than double the percentage of teachers in rural areas was involved in non-teaching assignments than teachers in the urban areas. Not much difference is observed in the number of days spent on non-teaching assignments across school types.

It is further observed that the highest number of teachers involved in non-teaching assignments amongst

Figure 4.14

Percentage of Teacher Involved in Non-Teaching Assignments : All States



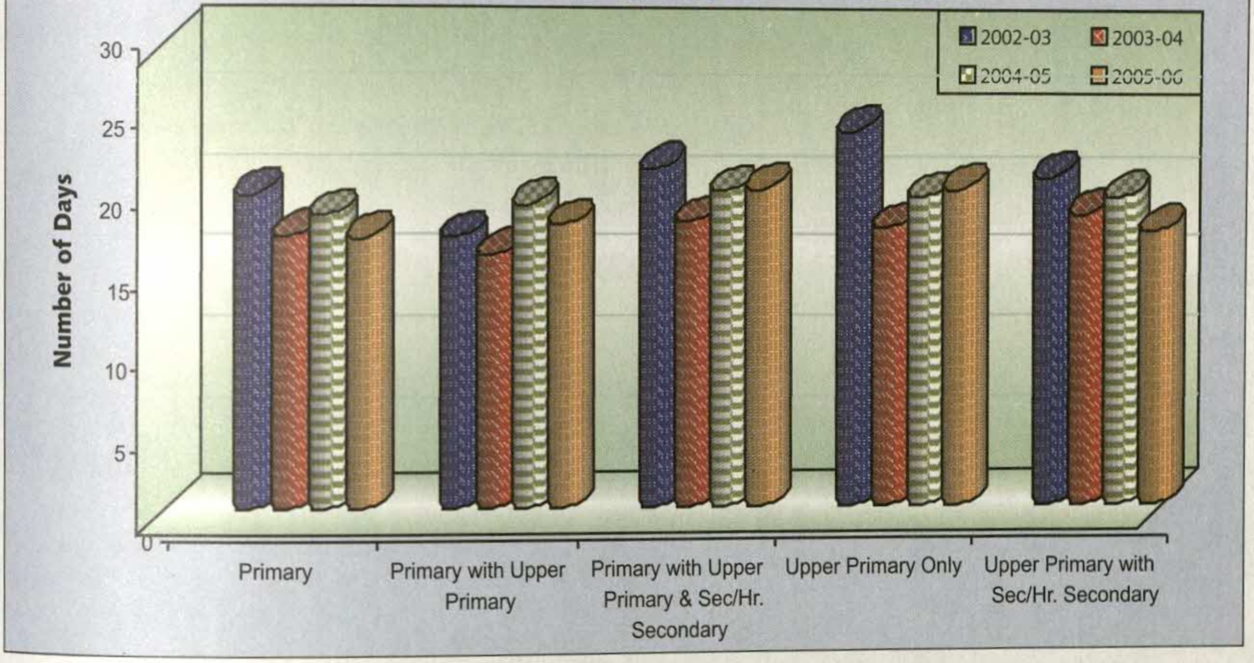
major states was in West Bengal and Bihar (25 percent), followed by Assam (23 percent), Himachal Pradesh (21 percent), Kerala (20 percent), and Tamil Nadu (16 percent). On the other hand, the percentage of such teachers in Chhattisgarh, Delhi, Karnataka, Puducherry, Punjab and Rajasthan was low as majority of the teachers in these states were not involved in non-teaching assignments during the previous academic year. The teaching-learning, if not taking place regularly may not be because of involvement of teachers in non-teaching assignments as teachers are involved in non-teaching assignments only for a few days and percentage of such teachers has also been quite low. It may, however, be noted that in a few smaller states, such as Andaman and Nicobar Islands, Goa and Meghalaya, the percentage of teachers involved in such assignments is above 20 percent.

Table D24
Average Number of Working Days Spent on Non-Teaching Assignments
2003-04 to 2005-06

School Category	Number of Days Involved				
	All Areas	Rural Areas	Urban Areas	All Government Managements	All Private Managements
Primary Only	15	15	17	15	15
Primary with Upper Primary	16	16	19	16	14
Primary with Upper Primary & Secondary/ Hr. Secondary	18	17	20	17	19
Upper Primary Only	18	18	18	18	18
Upper Primary & Secondary/Hr. Secondary	16	15	19	15	16
All Schools	16	16	18	16	16
Percentage of Teachers Involved in Non-Teaching Assignments to Total Teachers					
2005-06	**11.36**	**12.63**	**6.98**	**13.76**	**6.02**
2004-05	15.06	16.60	9.56	18.06	7.62
2003-04	18.14	20.28	10.60	21.82	8.05

The data on all schools together reveals that, on an average, a teacher was involved in the non-teaching assignment only for 16 days during the pervious academic year (of the 11.36 percent of those who were involved). In rural areas, teachers were involved in assignments for 16 days compared to 18 days in urban areas. Teachers in government managed schools as well as teachers in schools run by private managements were engaged for 16 days in non-teaching activities. The average number of days spent on non-teaching assignments was highest (36 days) in Puducherry and the lowest (3 days) in Rajasthan. The average number of days spent on such types of assignments was also high in Bihar (25 days), Assam (24 days), Delhi (22 days), Jharkhand (26 days), Madhya Pradesh (22 days), Tripura (29 days), and Manipur (22 days). So far as teachers in Primary schools/sections are concerned, only 10 states reported more than 20 days' involvement in non-teaching assignments during the previous academic year. Assam (23 days), Bihar (24 days), Daman & Diu (27 days), Jharkhand (26 days), Madhya Pradesh (20 days), Puducherry (29 days) and Tripura (37 days) are few such states. In Delhi, Primary school teachers are reported to have been engaged for 15 days compared to 6 days in Chandigarh, 13 days in Tamil Nadu, 8 days in Karnataka and 7 days in Kerala.

Figure 4.15
Average Number of Working Days Spent on Non-Teaching Assignments : All States



Concluding Observations

The analyses presented above not only indicate that the number of teachers imparting elementary level of education has increased but all indicators analysed have shown consistent improvement over the previous years. The elementary schools/sections now have more average number of teachers than a few years back. The number of students per teacher measured in terms of pupil-teacher ratio, average number of students sitting in one classroom etc, all have improved over the previous years. Despite all such improvements, there are still locations where PTR is not satisfactory and a single classroom has to accommodate a large number of pupils. A good number of schools are either single-classroom or single-teacher schools despite availability of an average of 4 teachers per school, all of which need serious intervention. May be rationalization of teachers is the only solution.

The percentage of female teachers engaged in imparting elementary education has also improved but in a few states there number is not satisfactory and hence need improvement. The previous section on enrolment-based indicators reveals that quality of education in terms of learners' attainment across the country is not satisfactory which can be improved only through active participation of teachers. Useful in-service programmes can be of great help in improving classroom transaction. In the previous academic year, a good number of teachers across the country has undergone in-service training but efforts made are not reflected in the learners' attainment which is still a major area of concern. Without delay we should seriously identify training needs so that commensurate training can be arranged.

Lastly, we should initiate the process of filling-up vacant positions of teachers. The recruitments, which were undertaken in the recent past, suggest that many of the new teachers recruited are *para*-teachers. This is also evident from the growing number of such teachers engaged in imparting elementary education across the country. Quite a good number of schools are left to *para*-teachers to manage school affairs. Studies should be conducted on the functioning of all such schools and also quality of learner's attainment in these schools for which DISE data can be a rich source of information for initiating any study in this direction.

I LOVE MY
'INDIA'

Educational Development Index

Introduction

Internationally, Human Development Index (HDI) and Education for All (EFA) Development Index (EFA-DI) have been used for cross-country comparisons in overall human development and universalising elementary education respectively. Both HDI and EFA-DI measures outcomes. The HDI measures development by combining indicators of life expectancy, educational attainment and income. It uses adult literacy rates and combined gross enrolment ratio for primary, secondary and tertiary schooling as indicators of educational development and gives adult literacy more significance in computing the index. On the other hand, EFA development index uses one indicator as a proxy measure for each of the four EDI components and each component is assigned equal weight in the overall index. The indicators used are: (i) total primary net enrolment ratio; (ii) adult literacy rate; (iii) survival rate to Grade V; and (iv) average of three gender parity index for primary education, secondary education and adult literacy, with each being weighted equally.

> "Based on the DISE data, an effort has also been made by NUEPA and MHRD, to compute an Educational Development Index, separately for Primary and Upper Primary levels of education and also a composite index for the entire elementary education"

The provision and use of elementary education services in India has been improving quite fast during the last decade. However, the development has not been uniform across the states and districts in the country. The elementary education related interventions have been creating and improving access and infrastructure, investing in more teachers and their quality and several processes, aimed at improving educational outcomes related to not only enrolment and retention, but improving the learning levels. From the point of view of an education system that is transforming itself, it is important to look at not only the outcome indicators, but at the input and process indicators too. The purpose of an index that summarizes various aspects related to input, process and outcome indicators is to identify geographic areas that lag behind in overall education development. In India, DISE provides information on various school based inputs and processes as well some indicators related to outcomes. Based on the DISE data, an effort has also been made by the National University of Educational Planning and Administration (NUEPA) and the Government of India (MHRD, Department of School Education and Literacy) to compute an Educational Development Index (EDI), separately for Primary and Upper Primary levels of education and also a composite index for the entire Elementary education (*see Elementary Education in India: Progress Towards UEE: DISE Flash Statistics: 2006-07*; NUEPA and GOI, 2008) for which the Government of India constituted a Working Group on EDI in 2005-06 of which NUEPA was also a member[1]. It identified indicators and developed computation methodology. The basic purpose of computing an EDI is to know comparative status of a state vis-à-vis other states with regard to different aspects of universalisation.

Indicators Used

The Working Group on EDI identified a number of indicators falling under different aspects of universalisation of education, covering input, process and outcome indicators. This set of indicators take note of all aspects and is expected to present the true picture of universalisation. The variables used to compute EDI in the present exercise are presented in Table E1. It may also be noted that EDI in India is still evolving and each indicator used have a specific purpose. However, they are not fixed and hence a review may be undertaken periodically. If need be new indicators can be added to the existing set of indicators or a few of them may be dropped out. As many as 23 indicators have been used in computing EDI which are further re-grouped into the following four sub-groups:

---

[1] Contributions received from the members of the Working Group on EDI constituted by the MHRD, in particular Dr. Deepa Sankar, World Bank, Delhi, and Mr. Dhir Jhingran, MHRD, New Delhi in developing methodology and identification of indicators are gratefully acknowledged. Inputs received from Dr. Deepa Sankar on this section is also thankfully acknowledged.

- Access,
- Infrastructure,
- Teachers, and
- Outcome indicators.

> "Pass percentage and percentage of appeared children passing with 60 percent and above marks in terminal Grades IV/V and VII/VIII, considered as proxy indicators of learners' attainment, are also used in outcome indicators in the EDI"

DISE provides information in case of most of these indicators, that have been used to compute the EDI at Primary and Upper Primary levels of education. Under the access indicators, two indicators namely, percentage of un-served habitations and availability of schools per thousand child population (6-11/11-14 year) have been used. The projected child population provided by the Office of the Registrar General of India has been used while the percentage of un-served habitations has been obtained from the All-India Education Survey: 2002-03. It may be noted that the information on un-served habitations is available for year 2002-03, though a number of Primary and Upper Primary schools have been opened across the country since then. Thus the same may not present the true picture with regard to availability of schooling facility in 2006-07. However, in view of the absence of other independent source of data on coverage of habitations, except state reports, EDI continues to use 2002-03 data, which will be updated as and when independent data becomes available. In view of these limitations, ratio of Primary to Upper Primary schools/sections has also been used as an indicator of access at Upper Primary level of education. While computing the ratio, both Primary and Upper Primary schools as well as Primary and Upper Primary sections attached to Secondary and Higher Secondary schools have been considered.

The Working Group on EDI identified five indicators under infrastructure set of indicators. Average student-classroom ratio, percentage of schools with student-classroom 60 and above, percentage of schools without drinking water facility in school and percentage of schools with common and girls' toilet are such indicators.

The third set of indicators, six in numbers, are teacher related indicators. Pupil-teacher ratio, percentage of female teachers, schools with PTR 60 and above, percentage of single-teacher schools, percentage of schools with less than 3 teachers and percentage of teachers without professional qualifications are such indicators under this category.

The last set of indicators is related to outcome indicators amongst which gross enrolment ratio (overall, SC and ST) is the most important one. While computing GER, projected population provided by the Office of the Registrar General of India have been used to workout 6-11 and 11-14 year population. It may be noted that GER for SC and ST population has been obtained from the Selected Education Statistics of the Ministry of HRD. Gender Parity Index (enrolment) is another important indicator which shows the extent of participation of girls compared to their counterpart boys in educational programmes. One of the other important outcome indicators is ratio of exit class over Class I enrolment which has been used only at Primary level. A few states reported this to be above 100 percent which is treated as missing values in EDI computation. Average dropout and repetition rates are other important outcome indicators which have been computed by using DISE data based on common schools in 2005-06 and 2006-07. In case of states having negative dropout rate are considered as missing values. Pass percentage and percentage of appeared children passing with 60 percent and above marks in terminal Grades IV/V and VII/VIII, considered as proxy indicators of learners' attainment, are also used in outcome indicators in the EDI. Needless to mention that while analysing EDI, data limitations presented above should be kept in mind.

Table E1
Indicators Used in Computing EDI

Component	Indicator
ACCESS	Percentage of Habitations not Served
	Number of Schools per 1000 Child Population
	Ratio of Primary to Upper Primary Schools/Sections (only at Upper Primary stage)
INFRASTRUCTURE	Average Student-Classroom Ratio
	Schools with SCR $\geq$ 60
	Percentage of Schools without Drinking Water Facility
	Percentage of Schools with Common Toilets
	Percentage of Schools with Girls' Toilets
TEACHERS	Percentage of Female Teachers
	Pupil-Teacher Ratio
	Percentage of Schools with Pupil-Teacher Ratio $\geq$ 60
	Percentage of Single-Teacher Schools where the Number of Students $\geq$15
	Percentage of Schools $\leq$ 3 Teachers
OUTCOME	Percentage of Teachers without Professional Qualifications
	Overall Gross Enrolment Ratio
	Gross Enrolment Ratio - Scheduled Castes
	Gross Enrolment Ratio - Scheduled Tribes
	Gender Parity Index in Enrolment
	Repetition Rate
	Dropout Rate
	Ratio of Exit Class over Class I Enrolment (only at Primary stage)
	Percentage of Appeared Children Passed
	Percentage of Appeared Children Passed with $\geq$ 60 percent and more Marks

Notes:

- For methodological details, please refer:

  Orienting Outlays Toward Needs: An Evidence-Based, Equity-Focused Approach for Sarva Shiksha Abhiyan by Dhir Jhingran and Deepa Sankar, Unpublished, 2006.

  Educational Development Index: A Suggestive Framework for Computation by Arun C. Mehta and S. A. Siddiqui, NUEPA, New Delhi, Unpublished, 2007.

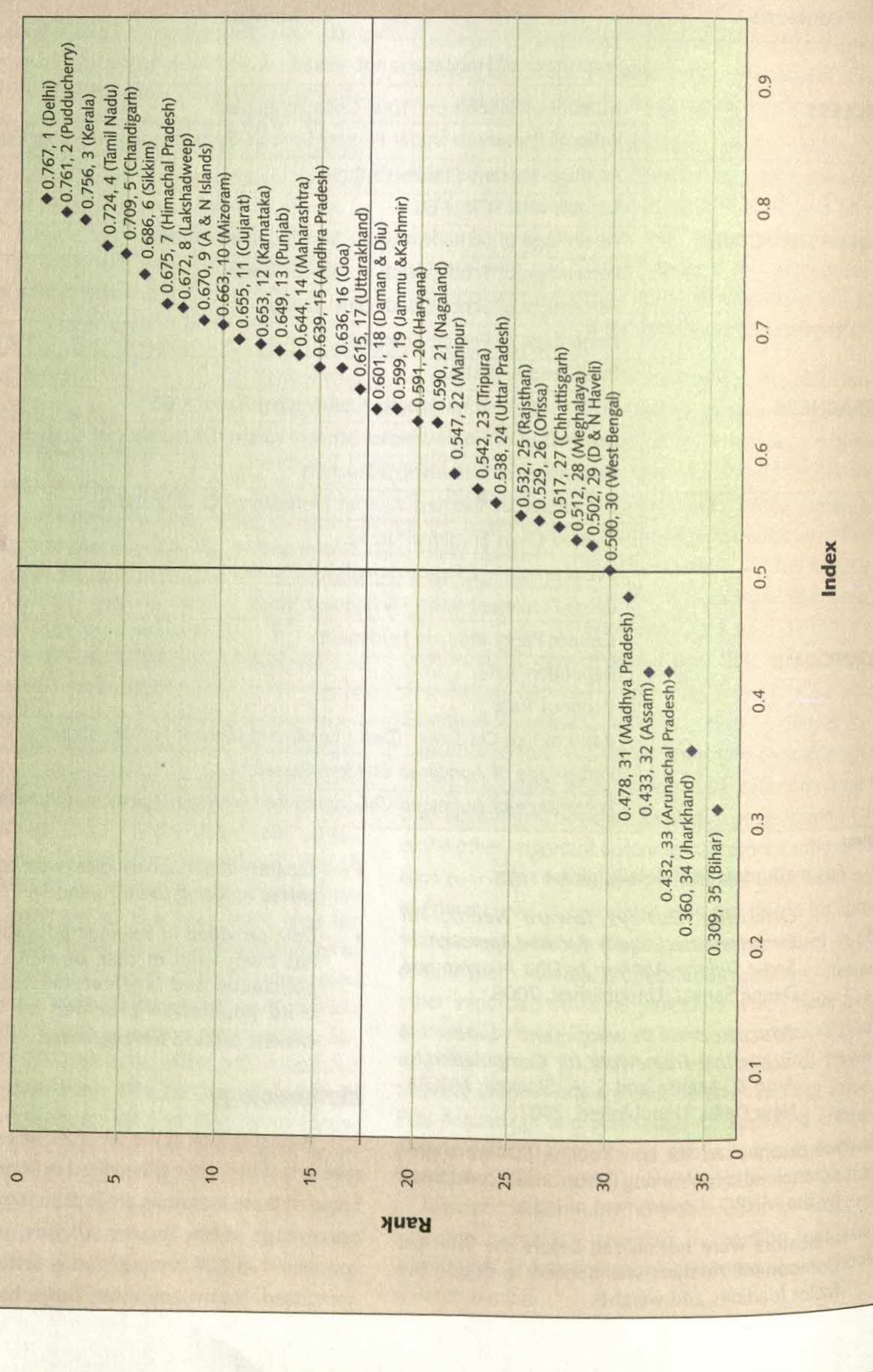
- Indicators used for constructing EDI were pre-determined by a Working Group on EDI constituted by the MHRD, Government of India.
- Indicators were normalized before the Principal Component Analysis was applied to decide the factor loadings and weights.
- Separate dimensional indices were constructed first before finalising the EDI; and
- Data provided in Selected Educational Statistics has been used in case of GER of SC and ST population and wherever necessary projected child population provided by the Registrar General of India has been used.

Methodology

A cursory look at the set of 23 indicators (Table E1) reveals that they have either direct or inverse relationship. Some of these indicators are in ratio form and others in percentage form. In view of this, each indicator considered in EDI computation is first required to be normalised. Normalised values range between 0 and 1

Figure 5.1

EDI (Index and Ranks) at Primary Level : All Managements, 2006-07



and it indicates the relative position of states with reference to a selected indicator. Thus in case of each indicator, in view of its nature, the best value and the worst value are identified which are then used to transform by using the following formula:

$$NV_{ij} = 1 - \left[\frac{\{\text{Best } X_i - \text{Observed } X_{ij}\}}{\{\text{Best } X_i - \text{Worst } X_i\}} \right]$$

where NV_{ij} represents normalized index of i^{th} indicator of j^{th} state and X_i is the original value of the i^{th} indicator. Upon receiving *normalized values*, the next step was to assign *factor loadings* and *weights*. Weights to indicators can be assigned in a number of ways. One can judge the significance of an indicator and accordingly assign weight which is based up on the value judgment of an individual. On the other hand, one can assign equal weights to all the indicators or assign different weights to different indicators according to significance of an indicator. The weightage in the computation of an EDI in the present exercise are determined by using *Factor Loadings* and *Eigen Values* from the Principal Component Analysis (PCA). PCA helps in reducing large number of indicators in a few (indicators/categories) without losing their significance which also simplifies analysis. PCA helps in weighing each indicator according to their statistical significance (see *Orienting Outlays Toward Needs: An Evidence-Based, Equity-Focused Approach for Sarva Shiksha Abhiyan by* Dhir Jhingran and Deepa Sankar, Unpublished, 2006). The components identified are known as *Principal Components* which explain maximum variance among a set of indicators. Therefore, the Principal Component Analysis is used to obtain factor loading and weights of the indicators in each of the four sets of indicators, which is done first at the Primary level and then at the Upper Primary level of education. Needless to mention that Primary stage/level of education consists of all Primary schools/sections irrespective of the type of schools; and Upper Primary stage /level of education consists of all the Upper Primary schools/ sections irrespective of the type of schools. This means that all the schools imparting elementary education across the country irrespective of school type are considered in computing EDI which includes schools under the government as well as private managements. Thus, indices for all the four types of indicators have been obtained separately for Primary and Upper Primary level of education which is then used to compute composite EDI for Primary and Upper Primary level of education separately. Composite EDI for Primary and Upper Primary levels of education is used to obtain composite EDI for the Elementary level of education.

"*W*eightage in the computation of an EDI are determined by using *Factor Loadings* and *Eigen Values* from the Principal Component Analysis. PCA helps in reducing large number of indicators in a few without losing their significance"

In this section outcome of the EDI based on the DISE 2006-07 data is presented. An effort has also been made to compare EDI based state rankings in 2006-07 with those during the previous year 2005-06.

Analysis of EDI

In view of different sizes and geographical locations of different States and UTs, they are further re-grouped under major states (21 states), states from the north-eastern region (7 states, excluding Assam, which has been considered as a major state because of its size and experience of DPEP), and smaller states (7 states). All the three groups and states in each group are at different level of education development. In view of spatial dimension, their need and requirement vary from state to state. For example, north-eastern states may need more new schools than in the states from the southern region. Similarly smaller States/UTs such as Andaman and Nicobar Islands because of their locations, need to be analysed separately. Most of the major states have experience of implementing large scale programmes, such as DPEP, but the same is not true in case of states in the other two groups, which practically did not experience any such programme in the past. SSA is the first major programme which has been initiated in these smaller states besides the major states. Within each state group, EDI in case of each state was used to assign fresh rankings based on each set of indicators as well as separately for Primary, Upper Primary and composite Elementary levels of education. The EDI reveals a lot about the regional variations that exist in the country which is true both for Primary and Upper Primary levels of education.

North-Eastern States

The seven states grouped under north-eastern region are Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. Assam is not included in this group because of its size and also because of the fact that it experienced DPEP. The EDI presented in Table E2 reveals that Sikkim outperformed the other six states in the region which is true for Primary and composite Primary and Upper Primary (Elementary) levels of education. Incidentally, Sikkim is placed 13th among all the 35 States and UTs of the country in case of composite Primary and Upper Primary levels of education. The state attains an overall EDI of 0.662 for Elementary, 0.686 for Primary, and 0.637 for Upper Primary levels of education which is treated above average as an EDI ranges between 0.00 to 1.00. On the other hand, Mizoram with EDI of 0.658 at Upper Primary level is positioned first. In the previous year 2005-06, Mizoram was first in case of Primary as well as Upper Primary, and composite Primary and Upper Primary levels of education but except in case of Upper Primary level, it lost its position to Sikkim.

Table E2 (A)

Indices & Ranking at Primary/Upper Primary Level : North-Eastern States (Excluding Assam)

All Managements : All Schools, 2006-07

State	Access Index				Infrastructure Index				Teachers Index			
	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank
Arunachal Pradesh	0.468	6	0.184	7	0.463	6	0.644	5	0.464	7	0.691	5
Manipur	0.530	5	0.500	4	0.553	4	0.702	3	0.603	6	0.716	4
Meghalaya	0.850	1	0.491	5	0.350	7	0.490	7	0.617	5	0.729	3
Mizoram	0.716	2	0.758	1	0.653	2	0.710	2	0.756	2	0.747	2
Nagaland	0.588	4	0.485	6	0.604	3	0.656	4	0.662	3	0.682	6
Sikkim	0.601	3	0.521	3	0.764	1	0.833	1	0.780	1	0.771	1
Tripura	0.402	7	0.615	2	0.548	5	0.539	6	0.625	4	0.658	7

State	Outcome Index				Composite EDI					
	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank	Primary & Upper Primary Level	Rank
Arunachal Pradesh	0.332	7	0.354	7	0.432	7	0.484	7	0.458	7
Manipur	0.475	5	0.653	1	0.547	4	0.649	2	0.598	3
Meghalaya	0.402	6	0.371	6	0.512	6	0.522	6	0.517	6
Mizoram	0.525	1	0.415	3	0.663	2	0.658	1	0.661	2
Nagaland	0.482	4	0.440	2	0.590	3	0.572	4	0.581	4
Sikkim	0.511	2	0.375	5	0.686	1	0.637	3	0.662	1
Tripura	0.504	3	0.376	4	0.542	5	0.547	5	0.545	5

Individual EDIs in each set of indicators, however, reveal that Sikkim does not stand first in all the four sets which is true both for Primary and Upper Primary levels of education. So far as the access indicators at Primary level are concerned, it is found to be very high at 0.850 in case of Meghalaya, compared to 0.716 in case of Mizoram. The lowest EDI in case of access indicators is observed in case of Tripura, having an EDI of 0.402, followed by Arunachal Pradesh with an EDI of 0.468.

On the other hand, Sikkim is third with an EDI of 0.601 in case of access indicators, compared to an overall first rank at Primary level of education. But the situation is not the same in other sets of indicators at Primary level.

Figure 5.2
EDI at Primay Level : North-Eastern States

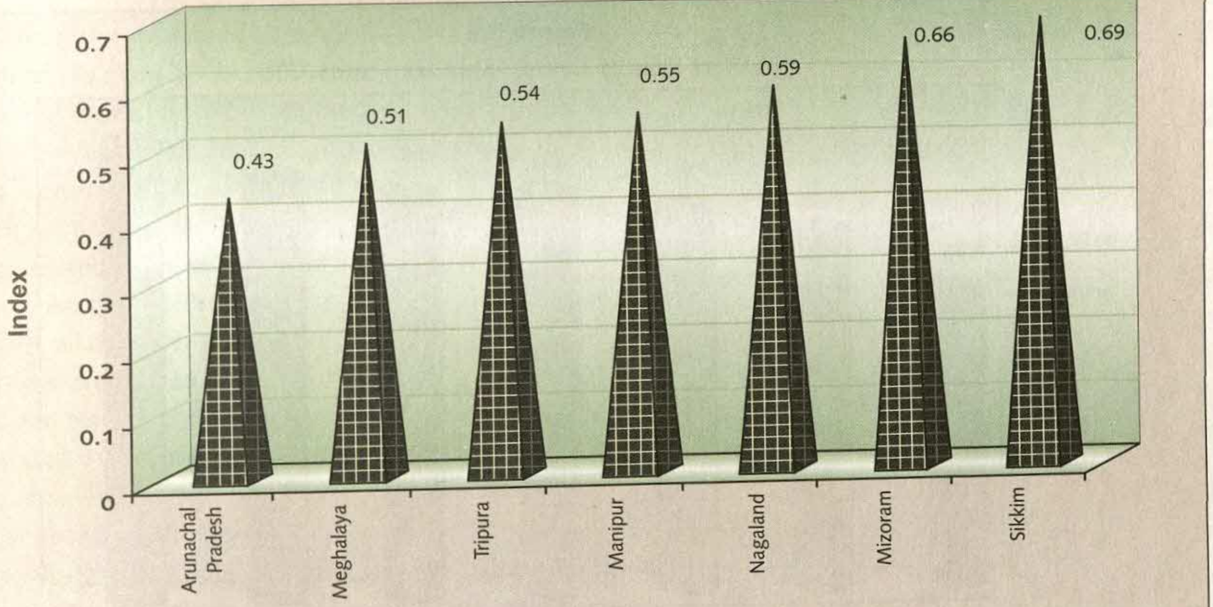
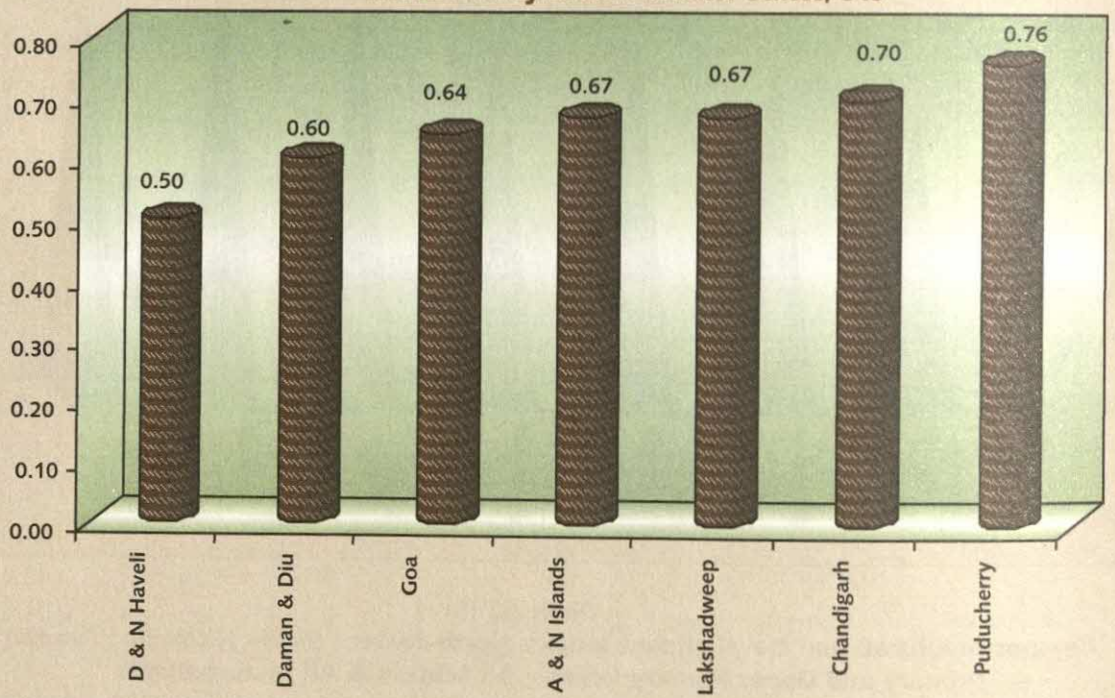


Table E2 (B)
Composite Educational Development Index : North-Eastern States (Excluding Assam) Primary and Upper Primary Levels : All Schools & All Managements

State	EDI & Rank Primary Level				EDI & Rank Upper Primary Level				Composite EDI & Rank (Primary & Upper Primary)			
	2005-06		2006-07		2005-06		2006-07		2005-06		2006-07	
Arunachal Pradesh	0.417	7	0.432	7	0.500	7	0.484	7	0.458	7	0.458	7
Manipur	0.520	3	0.547	4	0.608	3	0.649	2	0.564	3	0.598	3
Meghalaya	0.512	4	0.512	6	0.556	6	0.522	6	0.534	5	0.517	6
Mizoram	0.623	1	0.663	2	0.677	1	0.658	1	0.650	1	0.661	2
Nagaland	0.510	6	0.590	3	0.556	5	0.572	4	0.533	6	0.581	4
Sikkim	0.611	2	0.686	1	0.660	2	0.637	3	0.635	2	0.662	1
Tripura	0.511	5	0.542	5	0.560	4	0.547	5	0.535	4	0.545	5

So far as infrastructure set of indicators at Primary level is concerned, Sikkim has the highest EDI (0.764), which is also true for Upper Primary level of education (EDI, 0.833). It may be recalled that indicators, such as average SCR, availability of drinking water and common toilets and girls' toilets, are considered under infrastructural set of indicators. Sikkim is followed by Mizoram with an EDI of 0.653. The lowest EDI (0.350) is observed in Meghalaya which is quite similar to the position in the previous year 2005-06. This shows a wide spread regional variations. Meghalaya also has the lowest infrastructure index (0.490) in case of Upper Primary level, indicating that by and large majority of its schools imparting Elementary education do not possess minimum facilities in schools. But the position of the state in case of other sets of indicators, is slightly better than that of infrastructure index which is true both for Primary and Upper Primary levels of education. The schools in Arunachal Pradesh also do not have minimum facilities as the EDIs obtained at the Primary and Upper Primary levels respectively are 0.463 and 0.644. It is worth mentioning here that Arunachal Pradesh stands last in Primary level EDI (0.432) as its ranking is 33 out of 35 states included in the analysis. In 2005-06, it was at 34th position. Arunachal Pradesh has also a lower rank in Upper Primary (30) and Elementary (32) levels as a whole. It is also interesting to further note that irrespective of states, infrastructure facilities are much better in Upper Primary schools than the same in the Primary schools across the seven states of the north-eastern region.

Figure 5.3
EDI at Primay Level : Smaller States/UTs



"*Like infrastructure, most of the states in the north-eastern region are also better placed at Upper Primary level with regard to teachers' indicators compared to Primary level*"

So far as the set of teachers' indicators is concerned, it is Sikkim that is on top of the list with EDI of 0.780, compared to an EDI of 0.648 in the previous year. It may be recalled that six indicators concerning teachers, including percentage of female teachers and pupil-teacher ratio, were used. Mizoram is second with EDI 0.756 and Arunachal Pradesh is the last with EDI 0.464.

In case of teachers' indicators, Sikkim, with EDI 0.780, stands 7th amongst all the 35 states in case of Primary education; and with EDI 0.771 in case of Upper Primary level of education, its rank is 12th. Last year, Sikkim was ranked 14th in case of teachers index in this regard. Likewise, the state has improved its positions in case of all the three levels of education. Like infrastructure, most of the states in the north-eastern region are also better placed at Upper Primary level with regard to teachers' indicators compared to Primary level. Both at the Primary and Upper Primary levels of education, the lowest ranked state in the north-eastern region with regard to teachers' indicators is Arunachal Pradesh with an EDI of 0.464 at Primary and 0.691 at Upper Primary level. The corresponding position of Arunachal Pradesh, amongst all the 35 states, is 28th at Primary and 21st at Upper Primary level of education which shows a slight improvement in its position compared to the same in the previous year.

The last set of indicators used is the outcome indicators. As many as 9 indicators are used to see the position of all the 35 states, including seven states from the north-eastern region. The list of indicators used is quite comprehensive through which true picture of universalisation can be obtained. Barring Arunachal Pradesh and Manipur, all the other states in the north-eastern region reported a lower EDI for Upper Primary level compared to Primary level of education, which is just reverse in case of teachers and infrastructure indicators. Amongst all the states at Primary level, rank of Sikkim is 20th compared to 35th of Arunachal Pradesh. It shows improvement in case of Sikkim and deterioration in case of Arunachal Pradesh over the previous year. Correspondingly, they stand second and last within the north-eastern states with respective EDI values of 0.511 and 0.332. Their respective EDIs at Upper Primary level being lower than Primary level, are 0.375 and 0.354 which may be termed as far below the average EDI. However, Mizoram with an EDI of 0.525, ranked first in case of outcome index at Primary level, and 3rd (EDI, 0.415) at Upper Primary level. Though Sikkim stands first with regard to its position at the Primary level, but the same is not true in case of outcome index where it is ranked 2nd with an EDI value of 0.511. At the Upper Primary level, it is ranked 3rd compared to 5th in case of outcome index. It is observed that different states have different positions in different sets of indicators. A careful examination of all the four sets of indicators as well as individual indicators, and also computation of district-specific EDIs in each state, will help states to identify limitations without which no improvement can be expected. The provisions made under SSA can also be best used if such an analysis is carried out.

> "Puducherry is ranked 2nd in case of Primary and Upper Primary levels of education. Not only it could maintain its overall position at Upper Primary level but it has also advanced from its 4th position in 2005-06 to 2nd position with regard to Primary level of education"

Smaller States

States/UTs, such as Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Goa, Lakshadweep, and Puducherry, are the seven states which have been grouped under smaller states, based on the total number of schools and population they have (Table E3). May be these states are small in size but a cursory look at EDI values indicates that they are doing much better than a number of major states, both in Primary and Upper Primary levels of education. The EDI values and rankings during 2005-06 and 2006-07 indicate a marked improvement in case of Puducherry in composite Primary and Upper Primary levels of education. Not only it is ranked first within the set of smaller states but is also ranked 2nd with an EDI value of 0.771 amongst all the States and UTs of the country in case of composite Primary and Upper Primary levels of education. Amongst all states, Puducherry is ranked 2nd in case of Primary (EDI, 0.761) and Upper Primary (EDI, 0.780) levels of education. Not only it could maintain its overall position at Upper Primary level but it has also advanced from its 4th (EDI, 0.651) position in 2005-06 to 2nd (EDI, 0.761) position with regard to Primary level of education. Irrespective of an educational level, Puducherry is ranked first amongst the smaller set of states but the same is not true in case of all the four individual sets of indicators used in computing EDI both at the Primary and Upper Primary levels of education. The second amongst these states is Chandigarh with an EDI of 0.709 at Primary level and 0.752 at Upper Primary level of education. In case of composite Primary and Upper Primary levels, Chandigarh again is ranked second with an EDI of 0.731.

It may be of interest to note that Chandigarh's overall ranking is 5th (EDI, 0.709) at the Primary and 4th (EDI, 0.752) at Upper Primary level. The other smaller state doing better is Lakshadweep which has only 30 schools under its administration. In overall ranking, it stands 8th at Primary level (EDI, 0.672) and 7th (EDI, 0.713) at Upper Primary level of education.

Irrespective of states, EDI values at Upper Primary level of education is much higher than the same at the Primary level of education which is quite similar to states in the north-eastern region and also during the previous year. Further, it is observed that except Dadra & Nagar Haveli (29th rank), all smaller states have rankings within the first 20 states at the Primary level. With regard to ranking of all these states at Upper Primary level, all of them except Dadra & Nagar Haveli stand within the first 17 states.

Table E3 (A)
Indices & Ranking at Primary/Upper Primary Level : Smaller States/UTs
All Managements : All Schools, 2006-07

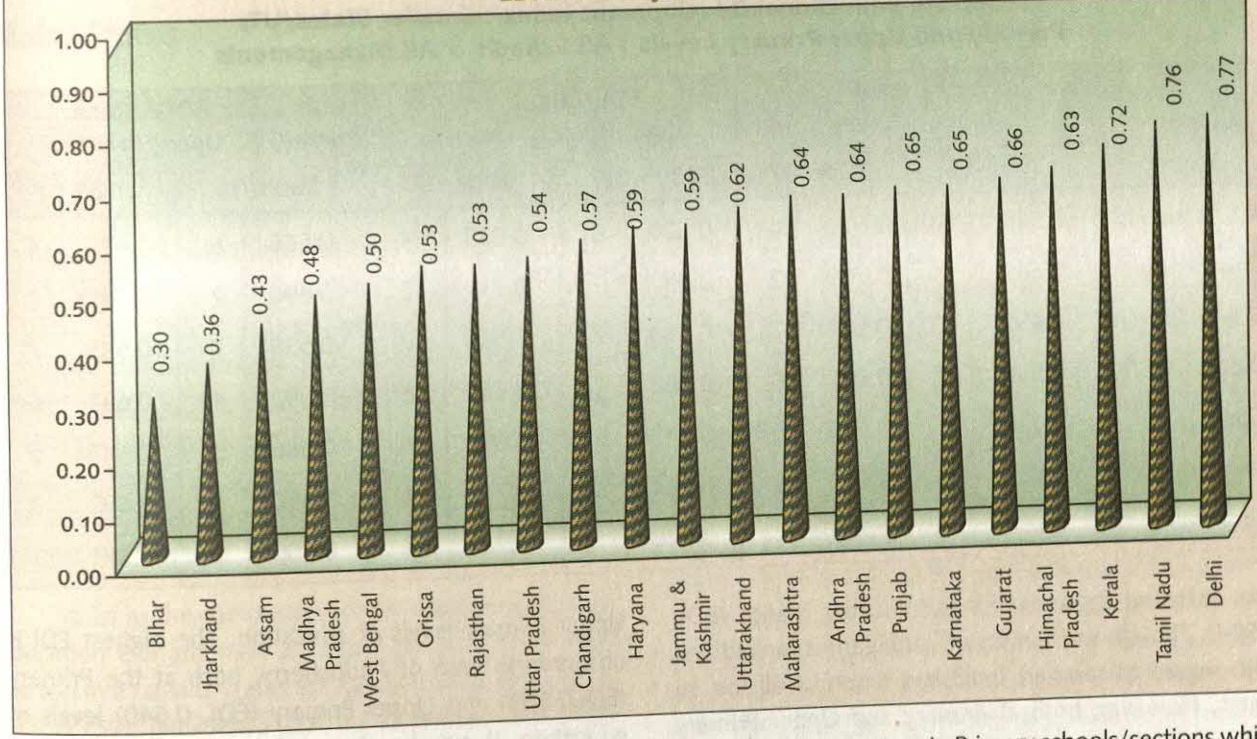
State/UT	Access Index				Infrastructure Index				Teachers Index			
	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank
A & N Islands	0.237	7	0.442	7	0.723	3	0.810	5	0.849	3	0.904	2
Chandigarh	0.365	6	0.739	1	0.792	2	0.829	4	0.933	1	0.970	1
D & N Haveli	0.507	2	0.670	4	0.524	7	0.582	7	0.430	7	0.629	7
Daman & Diu	0.389	5	0.713	2	0.679	6	0.745	6	0.736	5	0.744	6
Goa	0.506	3	0.516	6	0.686	5	0.861	2	0.736	6	0.854	4
Lakshadweep	0.533	1	0.605	5	0.704	4	0.842	3	0.834	4	0.780	5
Puducherry	0.480	4	0.684	3	0.863	1	0.875	1	0.855	2	0.891	3

State/UT	Outcome Index				EDI					
	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank	Composite (Primary & Upper Primary)	Rank
A & N Islands	0.605	2	0.520	3	0.670	4	0.683	4	0.676	4
Chandigarh	0.503	5	0.446	4	0.709	2	0.752	2	0.731	2
D & N Haveli	0.563	3	0.393	6	0.502	7	0.568	7	0.535	7
Daman & Diu	0.441	7	0.425	5	0.601	6	0.660	5	0.631	6
Goa	0.515	4	0.330	7	0.636	5	0.654	6	0.645	5
Lakshadweep	0.498	6	0.592	2	0.672	3	0.713	3	0.692	3
Puducherry	0.663	1	0.640	1	0.761	1	0.780	1	0.771	1

Like states in the north-eastern region, separate analysis is also carried out in case of each of the four sets of indicators. It is observed that EDI value for access indicators is much lower than for the other sets of indicators, which is true for both Primary and Upper Primary levels. The highest EDI for access indicators at Primary level is observed in Lakshadweep (EDI, 0.533) and the lowest (EDI, 0.237) in Arunachal Pradesh. At Upper Primary level, the lowest EDI is also observed in Arunachal Pradesh (EDI, 0.442) and the highest in Chandigarh (EDI, 0.739). Lakshadweep stands 5th (EDI, 0.605) amongst seven smaller states included in the analysis. Even within a set of indicators, the states have not provided equal measure of Primary and Upper Primary schooling facilities. Further, it is observed that all states have a higher EDI value at Upper Primary level than at Primary level.

It may be recalled that only two indicators, namely access-less habitations and number of schools per thousand population, were used under access indicators at Primary level. Since DISE does not collect information according to habitations, the number of access-less habitations in case of each state, as mentioned above, is taken from the AIES. It is also true that a good number of habitations have been provided schooling facilities since 2002-03, the year for which AIES data is the latest available. This is also true in view of SSA under which activities in terms of opening of new schools picked-up in 2002-03 onwards; this is not reflected in school-less habitations. In the light of these observations, ratio of Primary to Upper Primary schools/sections has been used at the Upper Primary level of education to assess the availability of Upper Primary schooling facilities which, like other indicators, is computed based on DISE data.

Figure 5.4
EDI at Primary Level : Major States



The next set of indicators analysed is infrastructure indicators. The highest EDI value at Primary level is observed in case of Puducherry (EDI, 0.863) and lowest (EDI, 0.524) in case of Dadra and Nagar Haveli. Puducherry attained 4th position amongst 35 states in this respect and Dadra and Nagar Haveli, 28th. Puducherry's overall position in infrastructure index at Upper Primary level is also 4th with an EDI value of 0.863. Next to Puducherry is Chandigarh (EDI, 0.792) at Primary level. Except Dadra & Nagar Haveli (EDI, 0.524 and rank 28), all other six smaller states ranked high and are within the first 15 amongst all the 35 states. Almost similar positions are observed at Upper Primary level wherein the position of Dadra and Nagar Haveli is 26th and the rest of the six states are ranked amongst the first 19 states. It may be recalled that Dadra and Nagar Haveli is amongst the lowest ranked states having an overall rank of 29th at Primary level (EDI, 0.502) and 24th at Upper Primary level of education (EDI, 0.568). Further, it has also been observed that both at these levels, EDI values are much high in case of infrastructure indicators than the access indicators which is similar to the situation in 2005-06. The EDI also suggests that Upper Primary schools/sections are better placed with regard to infrastructure in Primary schools/sections which is quite similar to the states in the north-eastern region. It is good to have better infrastructure in Upper Primary schools but it is equally important to provide better infrastructure also in all Primary schools.

The next set of indicators that have been analysed is indicators concerning teachers amongst which pupil-teacher ratio and percentage of single-teacher schools are the most prominent ones. In a good number of smaller states, EDI values for teachers indicators are higher than for access and infrastructure indicators. It may be recalled that smaller states as well as states from the north-eastern region are better placed with regard to PTR, both at Primary and Upper Primary levels of education. This is also true in case of a few other states, like Himachal Pradesh.

The highest EDI at Primary level is observed in Chandigarh (EDI, 0.933) and the lowest (EDI, 0.430) in Dadra and Nagar Haveli, which is exactly similar to the ranking in 2005-06. The second ranked state for this set of indicators is Puducherry with an EDI of 0.855, followed by Andaman and Nicobar Islands (EDI, 0.849) and Lakshadweep (EDI, 0.834). On the other hand, at Upper Primary level, Chandigarh with an EDI 0.970 is ranked first, followed by Andaman and Nicobar Islands (EDI, 0.904). Though small in size, Chandigarh is ranked first with regard to teachers indicators amongst all the 35 states. However, both at Primary and Upper Primary levels, Chandigarh, Dadra and Nagar Haveli, Daman and Diu and Lakshadweep are respectively at 1st, 7th. 6th and 5th positions which is quite similar to the ranking in the previous year.

Table E3 (B)
Composite Educational Development Index : Smaller States/UTs
Primary and Upper Primary Levels : All Schools & All Managements

State/UT	EDI & Rank Primary Level				EDI & Rank Upper Primary Level				Composite EDI & Rank (Primary & Upper Primary)			
	2005-06		2006-07		2005-06		2006-07		2005-06		2006-07	
A & N Islands	0.511	6	0.670	4	0.620	6	0.683	4	0.566	6	0.676	4
Chandigarh	0.642	2	0.709	2	0.737	2	0.752	2	0.690	2	0.731	2
D & N Haveli	0.492	7	0.502	7	0.584	7	0.568	7	0.538	7	0.535	7
Daman & Diu	0.536	4	0.601	6	0.648	4	0.660	5	0.592	4	0.631	6
Goa	0.529	5	0.636	5	0.643	5	0.654	6	0.586	5	0.645	5
Lakshadweep	0.635	3	0.672	3	0.664	3	0.713	3	0.650	3	0.692	3
Puducherry	0.651	1	0.761	1	0.748	1	0.780	1	0.700	1	0.771	1

Further, it is observed that the ranking of smaller states, except Dadra and Nagar Haveli, both in case of Primary and Upper Primary levels, is very high with regard to teachers indicators analysed amongst 35 states. Chandigarh UT is ranked first, both at Primary and Upper Primary levels, and Puducherry 4th at Primary and 5th at Upper Primary level of education. Another state from this group, i.e. Lakshadweep, is also ranked high at 6th at Primary and 5th at Upper Primary levels of education. However, all these states are not comfortably placed in other sets of indicators wherein their positions are much lower than the same in case of teacher-based indicators.

Making available schooling facilities, infrastructure and teachers in schools should also be reflected in the outcome indicators. That is why the last set of indicators analysed is the set of outcome indicators. It is noticed to have much lower EDI values than the infrastructure and teachers indicators and it is true for both Primary and Upper Primary levels of education. The highest EDI is observed in case of Puducherry, both at the Primary (EDI,0.663) and Upper Primary (EDI, 0.640) levels of education. It may be observed that Puducherry is not ranked first amongst other sets of indicators (except infrastructure indicators) used in computation of EDI. It is also of interest to note that in most of the states, EDI values are much lower at Upper Primary level than at Primary level, which is just the reverse when other sets of indicators are considered. Infrastructure and teachers indicators are better placed in the Upper Primary level but the same is not true in case of outcome indicators which plays the most important role for achieving the goal of universalisation of elementary education. Unlike in other sets of indicators, most of the smaller states are not placed within the first 10 states at Primary level so far as this set of indicators is concerned. However, Puducherry is placed 7th amongst the 35 states with regard to outcome indicators at Upper Primary level and 4th at Primary level. The 2nd ranked state at Primary level is Andaman & Nicobar Islands but the state is ranked 6th at Upper Primary level (EDI, 0.520). The EDI in case of Daman & Diu at Primary level (EDI, 0.441) and that of Goa (EDI, 0.330) at Upper Primary level are much lower than the same in case of Puducherry which is ranked first with regard to outcome indicators both in case of Primary and Upper Primary levels. Incidentally, Daman and Diu is one of the lowest ranked states with regard to outcome indicators at Primary level (rank 31).

Major States

As mentioned above, that the seven states of the north-eastern region and seven other smaller states have been clubbed in two separate groups, and the remaining 21 states, including the national capital of Delhi, have been grouped under major states. Except Delhi, all the other states in the group have experience of initiating major programmes like the District Primary Education Programme (DPEP).

> "So far as the composite Primary and Upper Primary EDI amongst 21 major states is concerned, the top five ranking states are Kerala, Delhi, Tamil Nadu, Himachal Pradesh and Karnataka; it is almost similar to the rankings in the previous year"

So far as the composite Primary and Upper Primary education EDI amongst 21 major states is concerned, the top five ranking states are Kerala (EDI, 0.772), Delhi (EDI, 0.757), Tamil Nadu (EDI, 0.741), Himachal Pradesh (EDI, 0.707) and Karnataka (EDI, 0.680); it is almost similar to the rankings in the previous year. Kerala and Delhi maintained their first and second positions but Karnataka conceded its fourth position (EDI, 0.680) to Himachal Pradesh (EDI, 0.707). However, Karnataka's EDI value (0.680) in 2006-07 is slightly higher than the same in the previous year (0.674). These states also have almost similar rankings both in case of Primary and Upper Primary levels of education. However, Tamil Nadu at Primary level conceded its second position to Kerala, and Karnataka its fourth position at Upper Primary level to Himachal Pradesh. EDI at Primary level in case of Tamil Nadu is higher in 2006-07 (0.724) than the same in 2005-06 (0.672). These states are generally seen as educationally advanced states. It may be noted that no major difference is found in composite EDI in case of first three states and also between fourth and fifth ranked states. However, irrespective of an educational level, the difference in EDI values between the highest and lowest ranked states is significant, showing that states are at different levels of educational development. This is also true for all the four sets of indicators used in computing EDI.

On the other hand, Bihar and Jharkhand are ranked 35 and 34 in case of composite primary and upper primary levels of education with an EDI as low as 0.321 and 0.381 respectively which is much lower than that of the top ranked states. Both states have lower EDI values in 2006-07 than the same in 2005-06 which is true for both primary, upper primary and composite primary and upper primary levels of education (barring upper primary in Bihar). In the overall ranking, West Bengal and Arunachal Pradesh are placed 33rd and 32nd respectively in case of composite EDI at primary and upper primary levels which is quite similar to their positions in 2005-06.

Like smaller states and states from the north-eastern region, all these five states have higher EDI values at Upper Primary than at Primary level of education. For example, EDIs in case of Kerala are 0.756 at Primary and 0.788 at Upper Primary levels compared to 0.767 and 0.747 respectively in case of Delhi. Almost similar EDI values are obtained in case of the remaining three states. Gujarat (0.677), Maharashtra (0.677), Andhra Pradesh (0.670) and Punjab (0.654), closely follow the first five ranked states (Table E4) in case of composite Primary and Upper Primary levels of education.

The individual EDI values in case of each of these states in four sets of indicators have also been analysed critically. First, index in case of access indicators is discussed which reveals that none of the top five ranked states maintained their respective positions at Primary level, which is also true for Upper Primary level of education. Himachal Pradesh improved its position from fourth to third at Primary and maintained its 4th rank at Upper Primary level. The top ranked Kerala lost its position to Chhattisgarh at Primary level and to Gujarat at Upper Primary level. Needless to mention that Gujarat is ranked 5th (EDI, 0.655) at Primary level amongst 21 major states but it is ranked at 11th, if all the 35 states are considered. The respective indices in case of Kerala are as low as 0.326 (rank 21) at Primary and 0.609 (rank 11) at Upper primary level. Despite Kerala having been doing well in all other sets of indicators, the state is not well placed with regard to access indicators. May be the state has achieved the goal of universal access and does not need more schools to open. The indices in case of Himachal Pradesh with regard to access indicators are as high as 0.595 at Primary level and 0.681 at Upper Primary level. Like other groups of states, EDI of major states in case of access indicators is far below than that of the other sets of indicators which is true for Primary as well as Upper Primary levels of education.

Table E4 (A)
Indices & Ranking at Primary/Upper Primary Level : Major States
All Managements : All Schools, 2006-07

State	Access Index				Infrastructure Index				Teachers Index			
	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank
Andhra Pradesh	0.610	2	0.567	14	0.604	13	0.773	9	0.681	8	0.823	4
Assam	0.593	4	0.521	17	0.302	20	0.425	20	0.402	17	0.614	13
Bihar	0.437	19	0.495	19	0.260	21	0.237	21	0.241	21	0.400	18
Chhattisgarh	0.624	1	0.607	12	0.483	18	0.570	17	0.491	14	0.481	16
Delhi	0.520	11	0.689	3	0.909	1	0.916	1	0.888	2	0.932	1
Gujarat	0.530	9	0.770	1	0.711	8	0.742	13	0.701	4	0.723	10
Haryana	0.483	17	0.648	7	0.801	4	0.871	4	0.587	11	0.640	12
Himachal Pradesh	0.595	3	0.681	4	0.679	9	0.791	8	0.698	6	0.783	5
Jammu & Kashmir	0.580	6	0.664	5	0.526	16	0.671	14	0.697	7	0.781	6
Jharkhand	0.435	20	0.347	20	0.306	19	0.429	19	0.303	20	0.503	15
Karnataka	0.537	8	0.694	2	0.677	10	0.757	12	0.670	9	0.731	9
Kerala	0.326	21	0.609	11	0.866	3	0.909	2	0.898	1	0.902	2
Madhya Pradesh	0.593	5	0.590	13	0.540	15	0.581	15	0.355	19	0.380	19
Maharashtra	0.503	14	0.660	6	0.660	11	0.767	10	0.700	5	0.739	7
Orissa	0.511	13	0.537	16	0.575	14	0.574	16	0.539	13	0.338	20
Punjab	0.526	10	0.639	8	0.887	2	0.907	3	0.615	10	0.738	8
Rajasthan	0.487	16	0.616	10	0.643	12	0.765	11	0.463	16	0.674	11
Tamil Nadu	0.501	15	0.538	15	0.771	5	0.829	6	0.763	3	0.863	3
Uttar Pradesh	0.450	18	0.499	18	0.741	7	0.830	5	0.378	18	0.229	21
Uttarakhand	0.572	7	0.623	9	0.759	6	0.808	7	0.568	12	0.453	17
West Bengal	0.513	12	0.290	21	0.497	17	0.511	18	0.476	15	0.536	14

Continued.....

So far as infrastructure indicators are concerned, except Delhi, none of the other first five ranked states could maintain their respective positions. Delhi in fact has improved its overall position from 2nd to 1st with respect to infrastructure index which is true both for Primary (EDI, 0.909) and Upper Primary (EDI, 0.916) levels of education. Higher infrastructure index indicates that most of the schools in Delhi have got drinking water, common toilets and girls' toilet facility, which is not true for other four states. It may be recalled that Himachal Pradesh has very high ranking with respect to access indicators but the same is not true for infrastructure index. The state ranked 9th at Primary level (EDI, 0.679) and 8th at Upper Primary level (EDI, 0.791) in this aspect. Punjab with an overall rank of 9th (composite Primary and Upper Primary) is placed 2nd (EDI, 0.887) at Primary level and 3rd at Upper Primary level (EDI, 0.907) with regard to infrastructure indicators. By and large, Tamil Nadu could also maintain its overall rank regarding infrastructure indicators, that is, it is ranked 5th (EDI, 0.771) at Primary level and 6th (EDI, 0.829) at Upper Primary level, compared to its overall 3rd rank (EDI, 0.741). Further, infrastructure index reveals that by and large, it is higher in case of Upper Primary level compared to Primary level. The same was also observed in case of smaller states and states in the north-eastern region.

Table E4 (A)
Indices & Ranking at Primary/Upper Primary Level : Major States
All Managements : All Schools, 2006-07

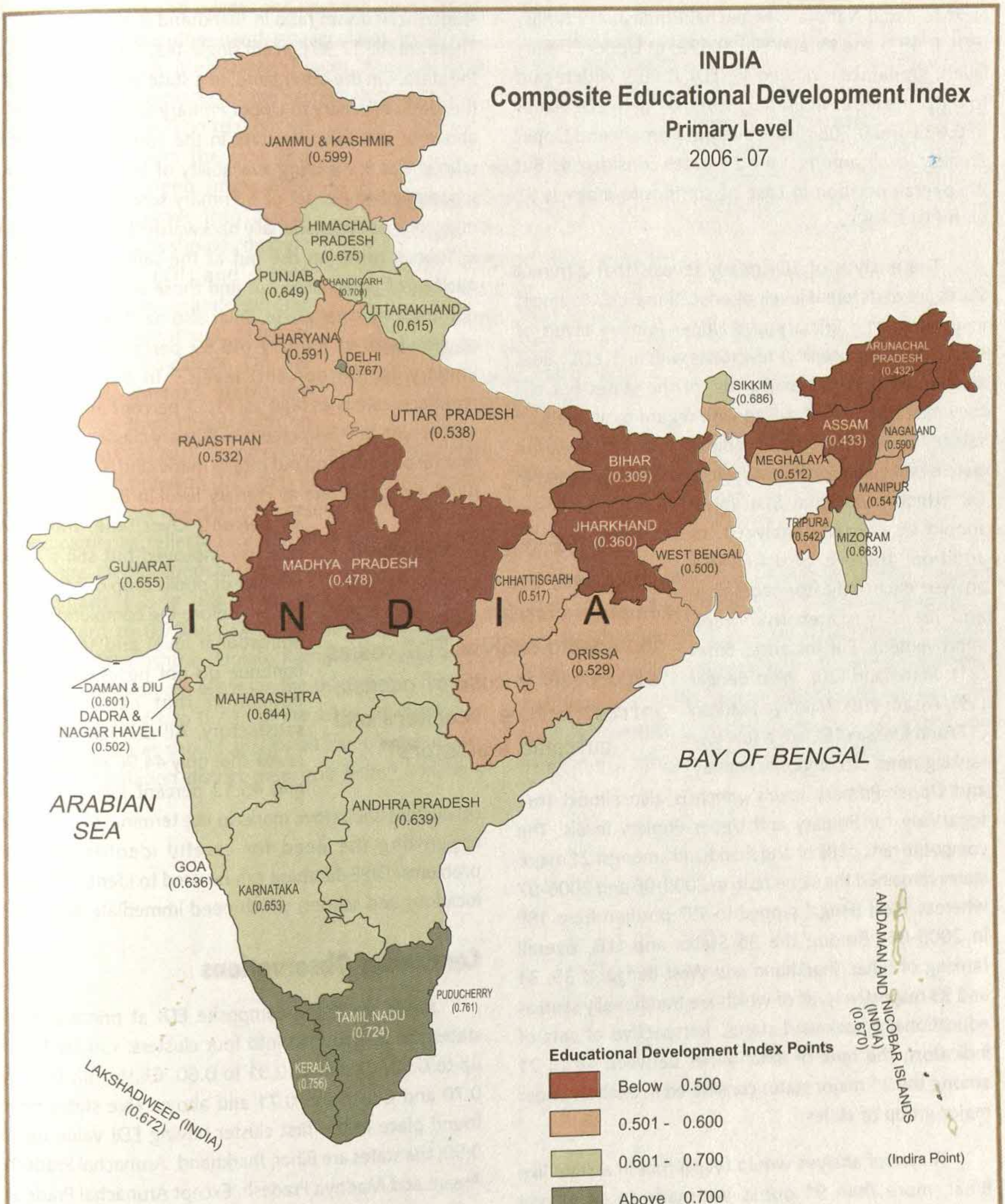
State	Outcome Index				EDI					
	Primary Level	Rank	Upper Primary Level	Rank	Primary Level	Rank	Upper Primary Level	Rank	Composite (Primary & Upper Primary)	Rank
Andhra Pradesh	0.646	5	0.609	7	0.639	9	0.700	7	0.670	8
Assam	0.557	10	0.533	10	0.433	19	0.521	15	0.477	18
Bihar	0.388	20	0.228	21	0.309	21	0.334	21	0.321	21
Chhattisgarh	0.539	11	0.448	12	0.517	16	0.526	14	0.521	15
Delhi	0.564	9	0.409	14	0.767	1	0.747	3	0.757	2
Gujarat	0.593	7	0.560	8	0.655	5	0.699	8	0.677	6
Haryana	0.385	21	0.335	16	0.591	12	0.632	12	0.612	12
Himachal Pradesh	0.683	2	0.684	3	0.675	4	0.739	4	0.707	4
Jammu & Kashmir	0.577	8	0.547	9	0.599	11	0.667	9	0.633	10
Jharkhand	0.460	18	0.316	18	0.360	20	0.402	20	0.381	20
Karnataka	0.662	4	0.638	6	0.653	6	0.708	6	0.680	5
Kerala	0.665	3	0.693	2	0.756	2	0.788	1	0.772	1
Madhya Pradesh	0.492	16	0.384	15	0.478	18	0.483	17	0.481	17
Maharashtra	0.629	6	0.659	5	0.644	8	0.710	5	0.677	7
Orissa	0.467	17	0.326	17	0.529	15	0.445	18	0.487	16
Punjab	0.453	19	0.308	19	0.649	7	0.659	10	0.654	9
Rajasthan	0.502	15	0.448	13	0.532	14	0.632	13	0.582	13
Tamil Nadu	0.735	1	0.763	1	0.724	3	0.757	2	0.741	3
Uttar Pradesh	0.528	12	0.464	11	0.538	13	0.514	16	0.526	14
Uttarakhand	0.513	14	0.673	4	0.615	10	0.643	11	0.629	11
West Bengal	0.527	13	0.295	20	0.500	17	0.416	19	0.458	19

The next sets of indicators that have been discussed fall under the category of teachers and outcome indicators. Delhi and Tamil Nadu maintained their high rankings with regard to teachers' index at Primary level which is also true for Upper Primary level of education. However, Kerala slipped to 2nd position. But the same is not true in case of Himachal Pradesh and Karnataka, both for Primary and Upper Primary levels of education. Kerala with EDI of 0.898 and 0.902 at the Primary and Upper Primary levels is respectively ranked 1st and 2nd so far as teachers' index is concerned. Kerala is followed by Delhi (EDI, 0.888; rank 2nd) and Tamil Nadu (EDI, 0.763; rank 3rd) at the Primary level. The rank of Karnataka, with an overall 5th rank, is 9th in case of teachers' index both at the Primary and Upper Primary levels. On the other hand, 4th ranked Himachal Pradesh is 6th (EDI, 0.698) at Primary level and 5th (EDI, 0.783) at Upper Primary level with regard to teachers' index.

Further, it is observed that in most of the 21 major states, teachers' index is observed to be higher for Upper Primary level compared to Primary level. However, the same is not true for outcome index, consisting of GER, examination results, GPI, dropout and repetition rates, etc. Tamil Nadu replaced Kerala and Delhi both at Primary (EDI, 0.735) and Upper Primary (EDI, 0.763) levels in this set of indicators.

Table E4 (B)
Composite Educational Development Index
Primary and Upper Primary Level : Major States
All Schools : All Managements

State	EDI & Rank Primary Level				EDI & Rank Upper Primary Level				Composite EDI & Rank (Primary & Upper Primary)			
	2005-06		2006-07		2005-06		2006-07		2005-06		2006-07	
Andhra Pradesh	0.604	6	0.639	9	0.705	6	0.700	7	0.654	6	0.670	8
Assam	0.454	18	0.433	19	0.525	15	0.521	15	0.490	17	0.477	18
Bihar	0.335	21	0.309	21	0.319	21	0.334	21	0.327	21	0.321	21
Chhattisgarh	0.557	11	0.517	16	0.561	14	0.526	14	0.559	13	0.521	15
Delhi	0.688	1	0.767	1	0.725	3	0.747	3	0.707	2	0.757	2
Gujarat	0.595	7	0.655	5	0.666	8	0.699	8	0.630	8	0.677	6
Haryana	0.521	15	0.591	12	0.591	13	0.632	12	0.556	14	0.612	12
Himachal Pradesh	0.630	4	0.675	4	0.707	5	0.739	4	0.668	5	0.707	4
Jammu & Kashmir	0.556	12	0.599	11	0.639	10	0.667	9	0.597	11	0.633	10
Jharkhand	0.428	20	0.360	20	0.441	20	0.402	20	0.435	20	0.381	20
Karnataka	0.627	5	0.653	6	0.720	4	0.708	6	0.674	4	0.680	5
Kerala	0.660	3	0.756	2	0.755	1	0.788	1	0.708	1	0.772	1
Madhya Pradesh	0.514	16	0.478	18	0.509	16	0.483	17	0.512	16	0.481	17
Maharashtra	0.593	8	0.644	8	0.677	7	0.710	5	0.635	7	0.677	7
Orissa	0.522	14	0.529	15	0.502	17	0.445	18	0.512	15	0.487	16
Punjab	0.568	10	0.649	7	0.648	9	0.659	10	0.608	9	0.654	9
Rajasthan	0.540	13	0.532	14	0.626	12	0.632	13	0.583	12	0.582	13
Tamil Nadu	0.672	2	0.724	3	0.730	2	0.757	2	0.701	3	0.741	3
Uttar Pradesh	0.482	17	0.538	13	0.482	18	0.514	16	0.482	18	0.526	14
Uttarakhand	0.575	9	0.615	10	0.635	11	0.643	11	0.605	10	0.629	11
West Bengal	0.454	19	0.500	17	0.480	10	0.416	19	0.467	19	0.458	19



INDIA
Composite Educational Development Index
Primary Level
2006 - 07

Note: Map not to scale

Map 5.1

Next to Tamil Nadu are Himachal Pradesh at Primary (EDI, 0.683) and Kerala (EDI, 0.693) at Upper Primary levels. Karnataka is ranked 4th (EDI, 0.662) with regard to outcome index at Primary level, 6th with EDI values of 0.653 and 0.708 respectively at Primary and Upper Primary levels amongst the 21 states considered. But it's overall position in case of composite index is 5th with EDI 0.680.

The analysis of EDI clearly reveals that different states are at different levels of educational development in general, and Primary and Upper Primary levels of education in particular. A few states with high EDI values are termed better than the rest of the states but still they may not be well placed with regard to all the four sets of indicators used in computation of EDI. Even if a state is ranked first, still it may need further improvement for which individual EDI value should be critically analyzed. In addition, there is also need to analyse each indicator separately and identify states that need improvement. For instance, Bihar (21), Jharkhand (20), West Bengal (19), Assam (18), Madhya Pradesh (17) and Orissa (16), are a few low ranking states on composite Primary and Upper Primary levels which is also almost true separately for Primary and Upper Primary levels. The composite rank of Bihar and Jharkhand amongst 21 major states remained the same both in 2005-06 and 2006-07 whereas West Bengal slipped to 19th position from 18th in 2005-06. Among the 35 States and UTs, overall ranking of Bihar, Jharkhand and West Bengal is 35, 34 and 33 respectively, all of which are traditionally seen as educationally backward states. Irrespective of sets of indicators, the rank of Bihar varies between 18 to 21 among the 21 major states considered in analysis under major group of states.

> "To improve their overall position, the states should compute district-specific EDIs and should analyse EDI values separately in case of access, infrastructure, teachers and outcome indicators"

A careful analysis would reveal that in a state like Bihar, more than 91 pupils are made to sit in one classroom imparting elementary education. At the same time, pupil-teacher ratio in Bihar is very high (64 pupils per teacher), and in a good number of schools (17.17 percent) PTR is above 100. This is also true for another educationally backward state, namely Jharkhand. The student-classroom ratio in Jharkhand is as high as 65:1. There are still 17.30 percent single-teacher schools across the state. On the other hand, in a state like West Bengal, the ratio of Primary to Upper Primary schools/sections is above 5; it is the only state in the county to have the ratio above 5, meaning availability of an Upper Primary school/section per set of 5 Primary schools/sections. In many of these educationally backwards states, enrolment is noticed to be on rise but at the same time a good number of pupils drop out and those who continue do not reach terminal grade. Bihar also has low percentage of girls both at Primary (45.89 percent) and Upper Primary (41.66 percent) levels. In Bihar, average repetition rate is as high as 11.13 percent and dropout rate as high as 9.34 percent in Primary classes compared to 8.09 percent drop out rate in Jharkhand. On the other hand, retention rate at Primary level in Bihar is around 44 percent. Over time, transition rate has improved but still a good number of pupils drop out from the system before the completion of an educational level and those who continue do not necessarily attain education that can be called satisfactory. All districts together reveal that only 44.96 percent boys and 45.12 percent girls pass with 60 percent and above marks in the terminal Grade IV/V, suggesting the need for careful identification of problems. DISE database can be used to identify all such locations and schools which need immediate attention.

Concluding Observations

Based upon the composite EDI at primary level, states can be grouped into four clusters: Cluster I: EDI up to 0.50, Cluster II: 0.51 to 0.60, Cluster III: 0.61 to 0.70 and Cluster IV: 0.71 and above. Five states have found place in the first cluster having EDI value up to 0.50; the states are Bihar, Jharkhand, Arunachal Pradesh, Assam and Madhya Pradesh. Except Arunachal Pradesh, remaining states are big in size (population) and important for the country to achieve the goal of UEE. On the other hand, 12 states are placed in the second cluster having an EDI value between 0.51 and 0.60. Small as well as major states are placed in this cluster. States like West Bengal, Chhattisgarh, Orissa, Rajasthan, Uttar

Pradesh, Haryana and Jammu and Kashmir are placed in this cluster. On the other hand, smaller states like Dadra and Nagar Haveli, Meghalaya, Tripura, Manipur and Nagaland are also placed in the second cluster with an EDI value between 0.51 to 0.60. All the 17 states from the first and second group need immediate attention. To improve their overall position, the states should compute district-specific EDIs and should analyse EDI values separately in case of access, infrastructure, teachers and outcome indicators. On the other hand, thirteen states are placed in the third cluster with an EDI between 0.61 to 0.70 and only 5 in the fourth cluster having an EDI between 0.71 to 0.77. Even the five top ranking states are not perfect in case of all the four sets of indicators as reflected in individual EDI values. The states are Delhi, Puducherry, Kerala, Tamil Nadu and Chandigarh. EDI in this group varies from 0.709 in Chandigarh to 0.767 in Delhi. Uttarakhand, Andhra Pradesh, Maharashtra, Punjab, Karnataka, Gujarat and Himachal Pradesh are placed in the third cluster with an EDI between 0.61 to 0.70. All the states including the top ranking states should analyse all the indicators used in EDI computation district-wise, and within a district, block-wise which should definitely be followed by adopting appropriate strategies without which neither their overall ranking nor status of universal elementary education in the state are expected to improve. Variables found to have higher weightage than others should be accorded the top most priority while adopting strategies in the year that follows. Some of such variables are:

> "Even the five top ranking states are not perfect in case of all the four sets of indicators as reflected in individual EDI values. The states are Delhi, Puducherry, Kerala, Tamil Nadu and Chandigarh."

Primary Level : Percentage of schools without drinking water facility, percentage of schools with common toilet, percentage of female teachers, pupil-teacher ratio, percentage of schools with PTR above 60, percentage of teachers without professional qualification, GER, dropout rate, and students passing with 60 percent and above marks in Grade IV/V; and

Upper Primary Level : Ratio of primary to upper primary schools/sections, student-classroom ratio, schools with SCR 60 and above, percentage of schools with girls' toilet, percentage of female teachers, percentage of single-teacher schools, schools with less than 3 teachers, GER and students passing with 60 percent and above marks in Grade VII/VIII.

I LOVE MY
'INDIA'

DISE Publications : A Few Comments

- *Many thanks for your publication, Elementary Education in India: Progress towards UEE, Analytical Report, I greatly value the same*, Dr. Sudarshan Iyengar, Vice-Chancellor, Gujarat Vidyapeeth, Ahmedabad
- *It is really a big task that has been completed by NUEPA. It requires lot of patience and courage, now all schools are really at one click away*, Prof. Sanjay Ganorkar, National Institute of Technical Teachers Training and Research, Bhopal
- *Since we are working on several government programmes including education, DISE reports would be very useful in process of our research and analysis*, Dr. Jawad A Khan, Research Associate, Centre for Budget and Governance Accountability, New Delhi
- *Thanks for sending me this invaluable volume*, Prof. Anil Sadgopal, Sahkar Nagar, Bhopal
- *DISE publications would help me immensely in my research work on education and gender*, Ms. Meenu Anand, Women's Studies & Development Centre, University of Delhi, Delhi
- *The addition of Analytical Report has enriched the collection of our library*, Librarian, G.B. Pant University of Agriculture & Technology, Nainital
- *There is no doubt that the publication is very useful, informative and thought provoking. This provide a wealth of data for understanding the state of elementary education in different districts of India*, Dr. J.C Goyal, formerly with NCERT, New Delhi
- *Your publications are surely useful and informative, always gives me a great encouragement to my further studies*, Ms. Hisako Akai, Fukuoka, Japan
- *I am sure the document will be of great help to all those who are committed to universal elementary education*. Mr. Prakash Karat, General Secretary, Communist Party of India (Marxist), New Delhi
- *Congratulations for launching over one million school report cards - this is wonderful achievement*, Dr. Michael Ward, Senior Education Adviser, DFID India, British High Commission, New Delhi
- *This is really amazing to see the remote village schools information on your website. The site will be very useful in understanding the status of the Indian schools*, Mr. R. Venkat Reddy, venkatmvf@yahoo.com
- *Thanks for felicitations for your monumental publication, Elementary Education in India: Progress towards UEE, Analytical Report*, Prof. Saiyid Hamid, former Vice-Chancellor, Aligarh Muslim University, Chancellor, Jamia Hamdard and Secretary, Hamdard Education Society, New Delhi
- *The efforts put in by NUEPA, in compiling the publication is truly commendable*, Ms. Mahrukh Singh, The Mother's International School, Sri Aurobindo Ashram, New Delhi
- *I find Analytical Report on elementary education very interesting and informative*, Dr. Trilok N. Dhar, Yojana Vihar, New Delhi
- *The data provided by DISE would be of immense help to the people who are working in the field of primary education. It would have been of great help to government to properly plan for the school level education for Muslims*, Mr. Kamal Faruqui, Chariman, Delhi Minorities Commission, Vikas Bhawan, New Delhi
- *The data so painstakingly collected and collated is bound to be found most valuable*, Mr. Subash C. Kashyap, C. P. R Library, New Delhi

- *It was great to learn about the progress made regarding DISE*, Dr. Deepa Sankar, Education Economist, The World Bank, New Delhi
- *I will read it with interest,* Prof. V.L. Chopra, Member, Planning Commission, Yojana Bhawan, New Delhi
- *We hope to benefit from the publication*, Dr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, New Delhi
- *The publication contains a wealth of meaningful information*, Prof. M. P. Kapoor, Project Director, NIIT Institute of Information Technology, New Delhi
- *Congratulations on the excellent production of the two volumes of the District Report Cards*, Prof. Amitabh Kundu, Centre for Studies in Regional Development, Jawaharlal Nehru University, New Delhi
- *The publication would definitely help the researchers and others in many significant ways*, Prof. Asim Kumar Nath, Netaji Subhas Open University, Kolkata
- *I have sent the copy for display in our library, Prof. Bipan Chandra*, Chariman, National Book Trust, India, New Delhi
- *I have been looking at the dpepmis.org site and am highly impressed by the content and context of system in place*, Mr. Harold Monu, Harmon-IT Limited, Stevenage
- *The publication is very informative*, Dr. Shyama Chona, Principal, Delhi Public School, R.K. Puram, New Delhi
- *The Analytical Report is quite informative and provides a wealth of opportunity to researchers & policy makers to access vital information pertaining to various facets of elementary education*, Ms. S.V. Lakshmi, St Stephen's College, New Delhi
- *The Analytical Report and State Report Cards brought out by NUEPA contains vital information related to elementary education*, Prof. Ahrar Husain, zahidmir@yahoo.co.in
- *The publication has been very interesting and useful to us in our work, activities and library collection*, Mr. Vijay Rawat, Priya, New Delhi
- *Of course, the publication is very useful and interesting*, Prof. N.C. Shah, Director, Sardar Patel Institute of Economic & Social Research, Ahmedabad
- *The publications and websites are very useful and will help our students to access information*, Dr. Varsha Hooja, Director, Technical Operations, National Resource Centre for Inclusion, Mumbai
- *I am sure that the researchers would find it immensely useful for their teaching and research*, Mr. K.T. Dilli, Librarian, Loyola College, Chennai
- *Thank you for sending me very useful publications*, Shri J. Veeraraghavan, Director, Bhartiya Vidya Bhavan, New Delhi
- *We are happy to express our sincere thanks to NUEPA for sending us the publication*, Ms. Virgil D. Sami, Executive Director, Arunodhaya, Centre for Street and Working Children, Chennai
- *We hope that the contents would be very useful to WHO staff members*, Ms. Anchalee Chamchuklin, Information Management and Dissemination, World Health Organization, Regional Office for South-East Asia, New Delhi
- *The School Report Cards e-database is a powerful tool to use for any large scale intervention in the metro cities*, Dr. Sangeeta Dey, Michael & Susan Dell Foundation, New Delhi

- *These are very useful reference documents giving district-wise data on enrolment, number of teachers and facilities in schools*, Prof. A B L Srivastava, Chief Consultant, Ed. CIL, New Delhi
- *I would like to congratulate NUEPA for bringing out a publication that provides in-depth documentation and data on current trends and issues of elementary education in India*, Prof. Aku-Ied, Director, The Aga Khan University, Karachi, Pakistan
- *It is an invaluable sourcebook for understanding and strengthening the elementary education system in India*, Prof. Debiprasad Mishra, Institute of Rural Management Anand, Gujarat
- *I have circulated the publication among my colleagues*, Prof. S. Neelamegham, President, NIILM, Centre for Management Studies, New Delhi
- *I have placed the publication in our library for wider consultation by our scholars*, Prof. C.H. Hanumantha Rao, Chairman, Centre for Economic and Social Studies, Hyderabad
- *I am sure my colleagues and I will find it useful*, Mr. K.C. Sivaramakrishnan, Centre for Policy Research, New Delhi
- *As the publication is quite informative, I hope the teacher participants will be really benefited*, Dr. H.S. Bhatia, Director, UGC-Academic Staff College, Guru Nanak Dev University, Amritsar
- *I would like to congratulate NUEPA for the tireless effort made in bringing out the publication, I believe this will be an asset for the country in the field of education*, Dr. Vipralhou Kesiezie, Director, SCERT, Kohima
- *Really the publications are quite useful and informative*, Mr. Aswini Kumar Pati, Director & CEO, Indira Gandhi Integral Education Centre, Orissa
- *It is a valuable resource, which is added to our library*, Mr. Anil Pradhan, Member-Secretary, Sikshasandhan, Orissa
- *I would like to congratulate NUEPA for bring out the excellent report on Elementary Education in India: Analytical Report*, Ms. Malathi Somaiah, Researcher, Indian Institute of Management, Bangalore
- *We will surely share the report with all concerned*, Ms. Meenakshi Batra, National Director, Christian Children's Fund, Banglaore
- *NUEPA's success in operationalising the nationally acclaimed DISE has been one such landmark, revolutionizing the role of education planners, who can now address local developmental needs from an informed perspective, armed with statistical and situational data*, Mr. Samphe Lhalungpa, Chief, Education Section, UNICEF India Country Office, New Delhi
- *The teachers of the Academic Staff College found the Analytical Report extremely useful*, Dr. Rakesh Batabyal, Director, Academic Staff College, Jawaharlal Nehru University, New Delhi
- *It is, indeed, very informative compilation, which can be useful in various academic pursuits*, Prof. R.K. Kale, Dean of Students, Jawaharlal Nehru University, New Delhi
- *These reports will be of great help to us as reference material in our daily research work*, Prof. M.M. Gandotra, Director, Centre for Operations Research and Training, Vododara
- *It would be used with immense profit by hundreds of course participants who are university & college lecturers drawn from all parts of the country*, Prof. A.R. Kidwai, UGC Academic Staff College, Aligarh Muslim University, Aligarh
- *To understand strengths of the Indian elementary education, this type of comprehensive reports has a great importance*, Dr. D. Barkataki, Director, State Resource Centre Assam, National Literacy Mission Authority, Guwahati

- *These are going to be extremely useful as a reference material,* Mr. P.C. Mohanan, Deputy Director General, Government of India, National Statistical Commission, New Delhi
- *The publication contained good lot of materials useful to researchers pertaining to various aspects of elementary education,* Dr. K.S. Bhat, Regional Director, Council for Social Development, Hyderabad
- *A great piece of work, congratulation for putting everything in black and white,* Dr. Maheswar Lal, Asha for Education, Philadelphia
- *The publication indeed be of great help to us,* Ms. Ranjana Shah, Research, Monitoring and Evaluation, State Resource Centre, Uttarakhand, Dehradun
- *The document adds great value to understanding the education scene in India,* Ms. Shabnam Sinha, CEO, Education & Technology Services Limited, Mumbai
- *I congratulate NUEPA in bringing out such a comprehensive volume, for which massive efforts have been made,* Dr. Jacob Aikara, Rajagiri College of Social Sciences, Kochi
- *The document will be highly useful for teaching community and education loving people of our state,* Prof. Abani Boral, Vice-President, World Federation of Teachers' Union, National Co-Ordination Committee of Indian Teachers' Organisations, Bhubaneswar
- *The publications (Elementary Education in Rural and Urban India) would be very useful addition to our library,* Mr. Mohammad Hamid Ansari, Chairperson, National Commission for Minorities, Government of India, New Delhi
- *The publications containing valuable recent data on the state of elementary education in India will no doubt be found most useful by myself and my students at JNU,* Prof. D.N. Rao, Centre for Economic Studies & Planning, School of Sciences, Jawaharlal Nehru University, New Delhi
- *The publications have been displayed in our library for wider reading,* Dr. N. Jayaram, Director, Institute for Social and Economic Change, Bangalore
- *The publication will benefit our scholars immensely as it contains useful data pertaining to all the states,* Mrs. Bharati Baveja, shahidwitness@yahoo.com
- *Both the volumes are very useful for education fraternity at large,* Dr. Kamlesh P. Joshipura, Vice-Chancellor, Saurashtra University, Rajkot
- *The DISE publications on Rural and Urban India are highly useful for our students & researchers,* Prof. B. Hanumaiah, Vice-Chancellor, Babasaheb Bhimrao Ambedkar University, Lucknow
- *These documents will provide wealth of opportunity to the researchers and policy makers to access vital information pertaining to various facets of elementary education,* Mr. Subhash Deshmukh, Librarian, Guru Gobind Singh Indraprastha University, Delhi
- *The publications are very useful and informative and will benefit large section of our professional staff in the University,* Dr. R.P. Bajpai, Vice-Chancellor, Guru Jambheshwar University of Science & Technology, Hisar
- *I hope the publications will go a long way in providing a wealth of opportunity to researchers & policy makers to access vital information pertaining to various facets of elementary education,* Dr. S.N. Pathan, Vice-Chancellor, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
- *The data provided in the Analytical Tables are of immense utility,* Prof. P.M. Kulkarni, Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi

- *The DISE Flash Statistics is becoming smarter with more and more information. I congratulate DISE team for their total dedication in compiling the data*, Mr. S.S. Rajagopalan, The Hindu, Chennai
- *I congratulate NUEPA in brining out Flash Statistics which is an important publication relating to elementary education in India*, Dr. S.Kumar, General Secretary, Forum of Senior Citizens in Education, Panchkula
- *The publication is very useful and will be of immense help to research workers*, Mr. S. Abdul Gulam, Joint Director (Retired), Evaluation and Applied Research Department, Madras
- *DISE Flash Statistics would indeed be of great help to us*, Ms. Ranjana Shah, State Resource Centre, Uttarkhand, Dehradun
- *I have gone through the publication and found it useful and informative*, Dr. R.S. Sharma, Ex- Faculty Member, NUEPA, Panchkula
- *The statistics presented in the document is very useful for researchers and planners in planning for quality elementary education*, Registrar, Sri Sathya Sai University, Anantapur District
- *DISE Flash Statistics, guides us our future course of action towards achieving UEE*, Mr. Bijaya K. Rath, District Project Office, Sarva Shiksha Abhiyan, Cuttact
- *DISE Flash Statistics has a stamp of excellence*, Dr. S.L. Mehta, Vice-Chancellor, Maharana Pratap University of Agriculture and Technology, Udaipur
- *I thank you for your kind gesture, the publication has been displayed in our library*, Dr. D. Janaki, Vice-Chancellor, Mother Teresa Women's University, Kodaikanal
- *The publication would prove to be very useful for basic planning in the education sector*, Prof. Jai Rup Singh, Vice-Chancellor, Guru Nanak Dev University, Amristar
- *The publication would definitely enrich knowledge of researchers as well as teachers of our university in many significant ways*, Prof. Surabhi Banerjee, Vice-Chancellor, Netaji Subhas Open University, Kolkata
- *This is a welcome step and I appreciate the efforts undertaken by NUEPA*, Dr. Lokesh K. Shekhawat, Vice-Chancellor, Jai Narain Vyas University, Jodhpur
- *We are extremely thankful to you for sending such a valuable publication*, Librarian, Tilak Maharashtra University Library, Pune
- *The state-specific data on key indicators including the Education Development Index is very informative. I am indebted to you for helping me to assimilate information of such a great magnitude*, Dr. Indu Khetarpal, Principal, Salwan Public School, Gurgaon
- *The publication is quite informative*, Dr. C. R. Hazra, Vice-Chancellor, Indira Gandhi Agricultural University, Raipur
- *The publication would be of immense help to our Centre*, Prof. Eugene. D. Thomas, Director, State Resource Centre, North-Eastern Hill University, Shillong
- *I am happy to acknowledge the receipt of DISE Flash Statistics on Elementary Education in India. I sincerely wish to put on record not only my appreciation for the statistical analysis and presentation of data but also the way the raw data has been converted into a readily usable knowledge base*, Dr. M.K. Ramachandran Nair, Vice-Chancellor, University of Kerala, Thiruvananthapuram
- *We have kept the publication in the Central Library of the institute, which will be useful for our readers*, Dr. Yogendra Singh, Ex-Scientist, Indian Institute of Technology, Roorkee
- *The publication represents the result of enormous efforts put in by NUEPA; it will certainly be helpful in strengthening EMIS in India*, Prof. V.C. Kulandai Swamy, Former Vice-Chancellor, Indira Gandhi National Open University, Chennai

- *It is very informative,* Prof. Anwar Alam, Vice-Chancellor, Sher-e-Kashmir, University of Agricultural Sciences & Technology of Kashmir, Srinagar
- *The document very well describes the status of education all over the country and is quite impressive,* Prof. N.K. Bansal, Vice-Chancellor, Shri Mata Vaishno Devi University, Jammu & Kashmir, Katra
- *I found the Analytical Report very useful for comparative analysis at the state level,* Prof. R.K. Menaria, SFS, Jaipur
- *The document will be highly useful for teaching community and education loving people of our state,* Prof. Abani Boral, Vice-president, World Federation of Teachers' Union, National Co-ordination Committee of Indian Teachers' Organizations, Bhubaneswar
- *DISE publications annually produce a vast wealth of educational statistics and I am so happy that NUEPA has kept up the standards in generating periodic information so useful for all of us,* Dr. Preet Rustagi, Senior Fellow, Institute for Human Development, New Delhi
- *I am sure that our board is going to benefit very much from the DISE Publications,* Dr. W. Ibempishak Devi, Chairperson, Board of Secondary Education, Manipur
- *I shall be grateful if you include our library in your mailing list for further publications,* Mr. S. Siv Chidambaram, National Institute of Public Finance and Policy, New Delhi
- *We shall be pleased to review the Analytical Report in Indian Journal of Regional Science,* Prof. C.R. Pathak, Managing Editor, Regional Science Association, Calcutta
- *I must confess that after the monumental work of J.P.Naik on the history of Indian education your work related to elementary education in India is the most comprehensive data-base published so far. It will be an invaluable for all researchers and policy makers on education in the coming decades,* Prof. Gautam Sen, Director General, Indian Institute of Education, Pune
- *I appreciate the efforts put in brining out the publication,* Dr. P. Kumar, Director, National Tuberculosis Institute, Bangalore
- *The value of key indicators relating to elementary education in India will facilitate identification of important areas of intervention. The huge database contained in these volumes will facilitate research work in the area of school education,* Prof. Mamata Ray, President, West Bengal Board of Secondary Education, Kolkata
- *The DISE Flash Statistics is much appreciated and would be an useful addition to our Library,* Dr. Nirmala Jeyaraj, Principal & Secretary, Lady Doak College, Maduari
- *The DISE publications are extremely useful for research purpose,* Mr. S.K. Varma, V. V. Giri National Labour Institute, Noida
- *We find the DISE publications very useful,* Dr. Atony Jose, Management Development Institute, Gurgaon
- *It would be an immense help to future researchers in the field of education,* Dr. Abdul Waheed, Director, Centre for Promotion of Educational and Cultural Advancement of Muslims of India, Aligarh Muslim University, Aligarh
- *I appreciate the efforts made by NUEPA in bringing out the publication,* Prof. Arun S. Sutaria, Director General, Mahatma Gandhi Labour Institute, Ahmedabad
- *We found the publication of great significance providing vital information on key-indicators including the Educational Development Index,* Ms. Renuka Palit, Chairman, Jan Shikshan Sansthan, Institute of People's Education, Gaya

- *The publication prove to be very useful to us in both research and teaching*, Prof. Vishwanath Pandit, Head, Department of Economics, Sri Sathya Sai University, Anantapur District
- *I am sure that the staff and researchers would find it immensely useful for their teaching and research*, Mr. K.T. Dilli, Librarian Loyola College, Chennai
- *The document is kept in our library for the reference*, Secretary, Maharashtra State Board of Secondary & Higher Secondary Education, Shivajinagar, Pune
- *The publication is very useful and will help our researchers*, Prof. Indranee Dutta, Director, Omeo Kumar Das Institute of Social Change & Development, Guwahati
- *I find the publication well prepared, quite useful and informative*, Dr. B.N. Yugandhar, Member, Planning Commission of India, Yojana Bhawan, Parliament Street, New Delhi
- *The publication will be of great help in our work with children*, Ms. Virgil D'Sami, Executive Director, Arunodhaya, Centre for Street and Working Children, Chennai,
- *The DISE Flash Statistics is very useful for our readers*, Dr. Ghan Shyam Singh, Professor & In-charge, Chandra Shekhar Azad University of Agricultural & Technology, Kanpur
- *The publication would be very useful for research scholars working on different aspects of elementary education in India*, Mr. P.G. Dhar Chakrabarti, IAS, Executive Director, National Institute of Disaster Management, Ministry of Home Affairs, New Delhi
- *I write to appreciate the efforts NUEPA has been making for the last several years in strengthening EMIS in the country. The amount of data being disseminated regularly through DISE publications, enormous and rich in contents, attests to the significant achievement of NUEPA*, Dr. Raman P. Singh, Deputy Advisor (Education), Planning Commission, Yojana Bhawan, New Delhi
- *We would like to meet you to explore collaboration between UNESCO Institute for Statistics and NUEPA*, Mr. Minja Yang, Director and UNESCO Representative, UNESCO, New Delhi
- *District Report Cards on elementary education is a superb compilation providing critical information on key aspects of elementary education in the country. It is a work of very high quality brought out with super perfection by the committed faculty, which deserves all the credit and compliments*, Dr. Kailash Nautiyal, formally with NCERT, New Delhi
- *I am completing a project on primary education, the publications from NUEPA are extremely useful*, Prof. Gandhi Babu Veluri, Visaklhaptnam
- *The publication contains all the data, which is useful for research studies*, Dr. Padma Yadav, National Council of Educational Research and Training, New Delhi
- *I am sure it is a valuable study and contribution which will help the cause of education in the country*, Prof. Ranbir Singh, Vice-Chancellor, Nalsar University of Law, Hyderabad
- *Congratulations on all your good work with DISE data. It is really a fantastic achievement to get increasingly reliable data on 1.20 million elementary schools in India. I think a lot can be done in terms of district level analysis of the data.* Dr. Geeta Kingdon, Department of Economics, University of Oxford, Oxford
- *We are delighted to see that the new District Report Cards using DISE data are already online as they have wealth of interesting information*, Dr. Vandana Sipahimalani Rao, Human Development Economist, Manila, Philippines
- *Thanks for sending me two volumes of your valuable publication, Elementary Education in India*: District Report Cards, Prof. Ashish Bose, Leading Demographer and Former Professor, Institute of Economic Growth, Delhi

- *The publication will not only useful for my colleagues and me, but also for our students of B.EL.Ed*, Dr. Sudipta Ghose, Department of Education, Delhi University, New Delhi
- *It is, indeed, a treasure trove of the data relating to elementary education in India and can go a long way, if it is analyzed critically so as to hasten the process of UEE in the country*, Dr. S. Kumar, Former Director, The Bharat Scouts and Guides, Panchkula
- *It is huge collection of data, which is very useful for researchers. NUEPA must be congratulated for taking up such a massive venture*, Prof. Ruddar Datt, New Delhi
- *Just received the two volumes of elementary education in India. Should I say I am privileged? I have just leafed through the pages and have had a sensation. What a tremendous job done! Really grateful for the prompt dispatch*, Dr. Soumen Hom, soumenhom@rediffmail.com
- *I have greatly benefited from the rich database these reports are providing for academicians and research scholars, we often use this data for various purposes while preparing our research reports and papers. Needless to mention how thankful I am for receiving these on a regular basis*, Dr. M.D Usha Devi, Head, Institute for Social and Economic Change, Bangalore
- *Kudos, this is an excellent information and thankless efforts done by NUEPA which provides useful baseline information for those who are involved in programme evaluation*, Mr. P. S. Ragavan ragavan9648@gmail.com
- *I find the publication very informative and useful*, Mr. A. B. Bardhan, General Secretary, Communist Party of India, New Delhi
- *The publication provides comprehensive analysis about the status of elementary education in India*, Ms. Sushma Berlia, President, PHD Chamber of Commerce and Industry, New Delhi
- *District Report Cards will be of immense help in the activities in school education at CII*, Ms. Alka Chaudhary, Director, Confederation of Indian Industry, New Delhi
- *These publications would definitely enrich the knowledge of research workers as well as teachers of our University in many significant ways*, Prof. Surabhi Benerjee, Vice-Chancellor, Netaji Subhas Open University, Kolkata
- *We find this report useful addition for our library.* Mrs. P.S. Sharma, Central Library, IIT Bombay, Powai, Mumbai
- *I am astonished to see your hard work*, Prof. V.G. Jadhao, Principal, Regional Institute of Education. Ajmer
- *These volumes have wealth of information for understanding the situation of elementary education in India*, Prof. Ila Patel, Professor, Institute of Rural Management, Gujarat
- *Please accept our heartiest congratulation for presenting such colossal information in the form of Volume I & II of Elementary Education in India: Where Do We Stand?*, Col. B.S. Sharma, Chairman, Institute of Business Administration, New Delhi
- *The information would help us in many ways*, Mr. Sunil Gautam, Indian Institute of Dalit Studies, New Delhi
- *I would thank NUEPA for the valuable inputs provided though the School Report Cards*, Mr. G. Jaya Kumar, Capacity Building Specialist, American Red Cross, New Delhi
- *Heartiest congratulations for bringing out http://schoolreportcards.in, this is amazing achievement in a short time span*, Mr. Madne Laxman Dhondiba, laxmanmadne@rediffmail.com

- *I have gone through your documents on the web, they are immensely useful for my research. I want to congratulate you and also convey my thanks for providing such vast information*, Prof. Amulya Chagapuram, ICFAI University, Hyderabad
- *Many thanks for your publications, Elementary Education in India: State Report Cards, I greatly value the same*, Dr. Sudarshan Iyengar, Vice-Chancellor, Gujarat Vidyapeeth, Ahmedabad
- *We have displayed this publication in our department library, which will be of great help to our students and scholars*, Ms, Mini Dejo Kappen, Karunya University, Coimbatore
- *I am really amazed with the data available on the internet on Indian schools even on remotely located areas*, Mr. Kiran Kumar Avadhanula, Urban Sector Manger, Cinicinnati, USA.
- *This publication has been added to the holdings of the library for consultation of research scholars*, Mr. Naveen Mahajan, Nehru memorial Museum & Library, New Delhi
- *It is an invaluable sourcebook for understanding and strengthening elementary education in India*, Dr. Debiprasad Mishra, Professor, Institute of Rural Management Anand, Gujarat
- *As the publication is quite informative and useful, I hope teacher participants will be really benefited*, Mr. H.S. Bhatia, Director, UGC-Academic Staff College, Guru Nanak Dev University, Amritsar
- *Really the publication is quite useful and informative, thank you once again for your collaboration by providing information to us by sending us publication*, Dr. Aswini Kumar Pati, Director & CEO, Indira Gandhi Integral Education Centre, Orissa
- *It is a valuable resources which we will add to our library*, Mr. Anil Pradhan, Member-Secretary, Sikshasandhan, Orissa
- *We will surely share the report with all concerned*, Ms. Meenakshi Batra, National Director, Christian Children's Fund, Banglaore
- *To understand the strengthen of the Indian elementary education system; this type of comprehensive reports have a great importance*, Dr. D. Barkataki, Director, State Resource Centre Assam, National Literacy Mission Authority, Guwahati
- *The publication contained good lot of material useful to researchers pertaining to various aspects of elementary education, it is very useful to us in our work*, Dr. K.S. Bhat, Regional Director, Council for Social Development, Hyderabad
- *Analytical Report is marvelous piece of work and clearly demonstrates the kind of efforts this must have taken*, Mr. Suneet Sethi
- *Really appreciate the gesture on your part and the expanse of the data converted*, Mr. Subhrajit Singh, Sr. Managar, Development Support
- *The http://schoolreportcards.in is nice move. It helps if you are an academician, it helps if you are a policy maker, and it helps even if you are a common citizen. The data will help the process of empowerment and strengthen the democracy*, Dr. Ram Manohar Vikas, Indian Institute of Technology, Kanpur
- *I am sure it would be of great help*, Dr. Sharada Jain, Director, Sandhan (Society for Education & Development), Jaipur
- *It is indeed a very detailed document and holds valuable information*, Mr. Kashinath Bhoosnurmath, Programme Director, Save the Children India Office, New Delhi
- *This is what we have been waiting for*, Ms. Varsha Hooja, Director, Technical Operations, National Resource Centre for Inclusion Spastics Society of India, Mumbai

- *It is good, it will useful to our national portal,* Mr. N. Srinivasa Rao, Indian Development Gatway, Centre for Development of Advanced Computing (C-DAC), Hyderabad
- *These publications would be very useful to both students and teachers,* Dr. Savithri Singh, Principal, Acharya Narendra Deve College, Delhi University, Delhi
- *Rest assured that our education team in India will make full use of this publication, and will encourage others to do so well,* Mr. Sam Carlson, Lead Education Specialist for India, The World Bank, New Delhi
- *We highly appreciate NUEPA in bringing out such publications,* Dr. Barnali Biswas, Senior Analyst, Indicus Analytics Pvt. Ltd; Delhi
- *The information contained in this publication is indeed very valuable for understanding the status of school education in India. It is the publication of this nature that will enhance the reputation of NUEPA,* Prof. M. Anandakrishnan, Chairman, Madras Institute of Development Studies, Chennai
- *We appreciate the efforts made by NUEPA, in strengthening EMIS in India,* Prof. Sailabala Debi, Director, Centre for Multi-disciplinary Development Research, Dharwad
- *The report is a rich source of data and useful for our research students,* Prof. Geetha B. Nambissan, Chariman, Zakir Hussain Centre for Educational Studies, Jawaharlal Nehru University, New Delhi
- *I was impressed the way the DISE has been implemented across the country and the pioneering work being done by NUEPA,* Mr. K.S. Viswanathan, Chief Executive-India Operations, Wipro Infotech, Bangalore
- *We express our deep and sincere appreciation for the extensive data collection that has been done; collated and presented,* Mr. Vyjayanthi Sankar, Vice-President, Large Scale Assessments, Educational Initiatives Private Limited, Hyderabad.